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The Oldest Agricultural and Live Stock Journal in the Mississippi Valley

ESTABLISHED 1848



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Sweet Clover or Melilotus

I have been reading Bulletin 244, Ohio Agricultural Experiment Station, Wooster, Ohio, the most comprehensive work that has yet been published on the subject of this paper, and which may be had by addressing the station, enclosing a stamp.

The bulletin is complete in all its

ful effect as a fertilizer, and many favored it for all.

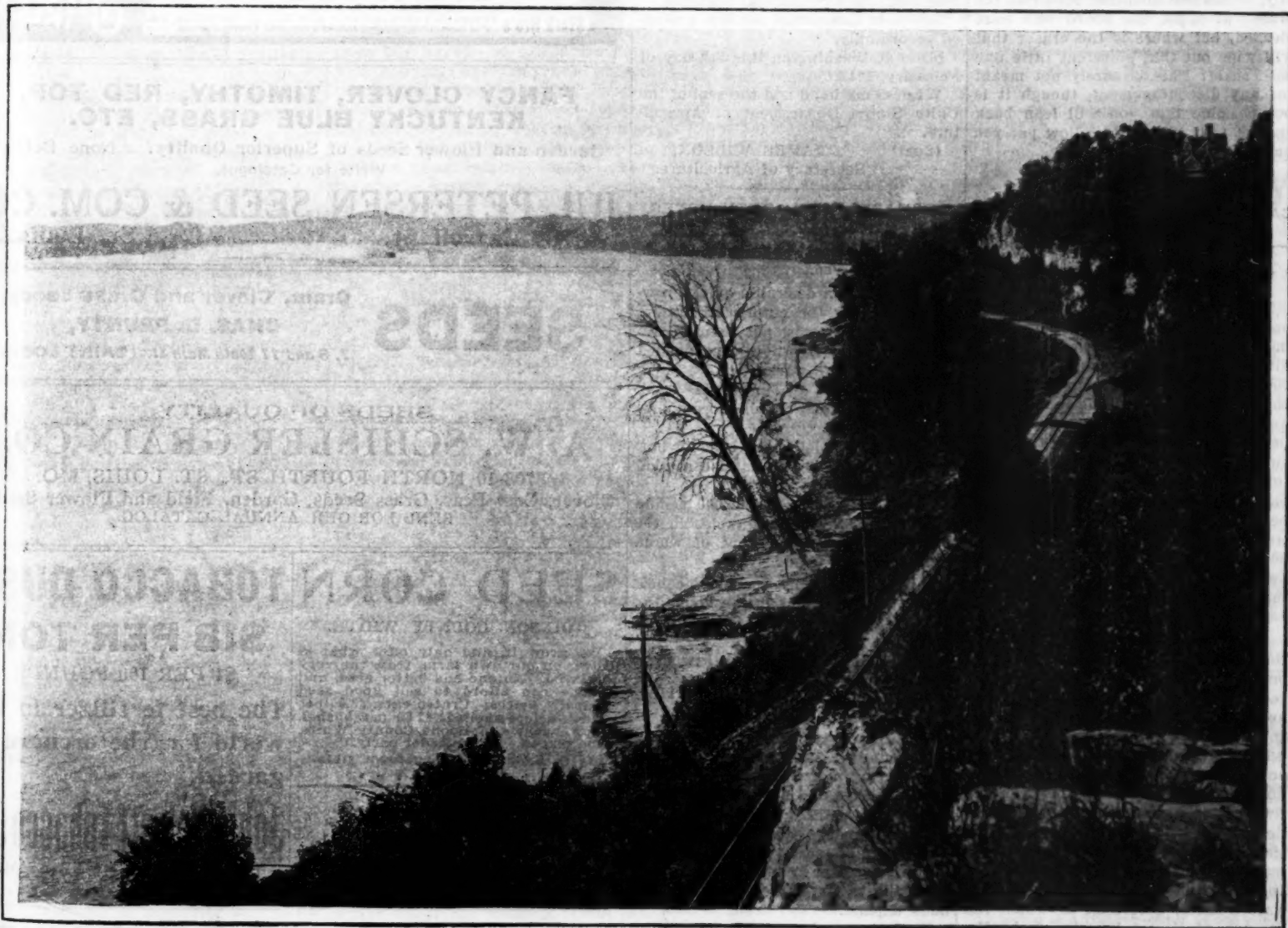
Quite a good many spoke of the difficulty in getting a stand as well as of the uncertain quality of the seed, some claiming to have sown several acres, not getting a plant, others only a thin stand from a good seeding. It seems that there is a general impression

or hay all speak well of it, and here I may say, that in South Dakota horse-men told me that the hay made from it was the best horse forage they had ever used.

We will sow three acres this spring on rye sown in October last, the land being two clayey points, rich enough, but hard to work, as the clay is tough

uncertain about, is the habit the seed has of not germinating as well as some other kinds of seeds do, and this makes me hesitate before seeding any considerable acreage of it, but we will put on a fair amount of medium red clover and if one misses, perhaps the other will not.

A relative who lives in the sweet



MISSOURI RIVER SCENERY.

details, yet I do not think that it gives an early enough date for its introduction, as I have known it here since 1868. Nearly 1900 Ohio farmers gave opinions in regard to the plant, and it is surprising to note that the answers almost all favored the plant for either pasture, hay or its wonder-

among farmers that the plant is going to fill a "long felt want," especially on lands that are badly washed, as it will grow on the most barren clay knoll as well as in the bottom of ditches, on gullied hillsides, preventing further soil erosion and filling the soil with rotted vegetable matter.

Those who have used it as pasture

and full of rotten limestone.

I think we will also mix some seed with our red clover seed, and try to get a few plants per acre started over the whole farm, and should our three-acre experiment prove successful, we will sow eight acres next spring.

There is no doubt about the value of the plant, and the only thing I am

clover seed district of Kentucky, says that the people there get a stand with more certainty than they do of red clover, suggesting the idea that it may be necessary to inoculate the soil.

At any rate it will pay to experiment with the new plant, as it will grow on many soils that will produce nothing else.

C. D. LYON.

Horticulture

HORTICULTURAL TALK.

By Edwin H. Riehl.

This is about the season of the year when our readers become anxious about the ensuing prospect for fruit. I will venture to say that all look well but peaches in this section. With reference to the latter, because of the severity of last winter's cold, nearly all peach trees are dead, or nearly so that the grubbing hoe is in order. It is the truth that peach trees here are practically wiped out. What shall we do, give up just because of an occasional hard winter or that tiny little insect which the peach king, Mr. Hale, says is a blessing to the persistent fruit grower? Of course it puts the careless fellow to the bad. And did you ever stop to think of that little fellow, hardly big enough to see with the naked eye, has attracted more attention, has made himself more famous, has done more to make the fruit grower more careful and successful than he otherwise would have been.

The multiplication tables bothered us a little in the good old school days, but that is no comparison to the one that confronts us today, that of San Jose scale. We used to make figures on the blackboard and naturally, occasional mistakes occurred, the eraser at hand, the board was soon cleared, but where is the eraser that will wipe out that persistent little San Jose scale? This is surely not meant for any discouragement, though it is not possible that you will lean back and let that tiny little fellow put you out of business.

Alton, Ill., Feb. 18, 1913.

CAMPAIGN AGAINST TREE-KILLING BEETLES IN NORTHEASTERN OREGON SHOWS HOW TO SAVE TIMBER.

The Secretary of Agriculture announces that investigations conducted in 1907 and 1910 to determine the conditions on an area of more than 1,000,000 acres in northeastern Oregon showed that the killing of a large number of trees by the mountain pine beetle had been going on in this area since 1905. It was estimated that thirty-five per cent of the lodgepole on 800,000 acres of the same area had been killed, or a total of over 8,000,000 trees. It was also estimated that 140,000 yellow pine had been killed by this beetle and that the invasion was moving south and southeast into the more valuable areas of yellow pine.

In order to demonstrate the practicability of the control measures recommended by the expert on forest insects of the Bureau of Entomology, an area of about 90,000 acres, principally in the yellow pine, was selected in which to conduct a beetle control project. This area was located south and southeast of the advance move of the swarms of depredating beetles in order to check it. The project was organized in 1910 under a co-operative agreement between the Bureau of Entomology, the Forest Service, and private owners, according to which the Branch of Forest Insects of the Bureau of Entomology made the investigations, recommended the methods, and gave instructions, and the Forest Service and private owners furnished the funds for the actual control work which was completed June 30, 1911.

In the spring and summer of 1912, a thorough inspection was made of the treated area. A similar untreated or check area in another forest was also examined. It was found that on the 87,950 acres of the treated area the number of trees killed by the insects had decreased from 37,178 trees to 4,698—a reduction of 32,480 trees—or

more than eighty per cent, while on the untreated check area in the other forest there was no decrease and in one small isolated area the increase in the number of trees killed was two hundred and forty per cent.

The results of this project, undertaken as it was, strictly as a demonstration, forcibly bring out the points that even under unfavorable conditions of a well-established and widespread dying of trees from insect attack it is possible and practicable to treat a small part of such an area, successfully check the spread of the pest, reduce the loss eighty per cent or more within the treated area, and protect large bodies of adjacent healthy timber; and they strongly emphasize the necessity for more extensive insect control work to curb the enormous and preventable killing of merchantable timber by barkbeetles.

MEXICAN FRUIT FLY.

The fact has been determined by the Secretary of Agriculture that the Mexican fruit fly (*Trypeta ludens*) infests grapefruit in the Republic of Mexico.

Now, therefore, I, James Wilson, Secretary of Agriculture, under authority conferred by section 7 of the act approved August 20, 1912, known as "The Plant Quarantine Act," do hereby prohibit the importation and entry into the United States from the Republic of Mexico, for all purposes, of the grapefruit and its horticultural varieties.

Notice of Quarantine No. 5 is amended accordingly.

Done at Washington this 8th day of February, 1913.

Witness my hand and the seal of the United States Department of Agriculture.

(Seal) JAMES WILSON,
Secretary of Agriculture.

ORCHARD AND GARDEN NOTES.

Test all vegetable seeds as soon as they are received.

Calliposis is a desirable quick growing annual for the cut-flower garden.

Go over the tools, put them in repair, and order any new ones needed for the summer's work.

Order plenty of sweet pea seed. There is no annual that is more appreciated than this.

Grand Rapids lettuce is best for hotbed or greenhouse. It is also a good variety for outside.

There are said to be 600,000 people engaged in growing vegetables in the United States, 90 per cent of whom own their own farms.

Sow a few asters, pansies, cobea, and hardy carnations in the house the last of the month for earliest flowers outside.

The Senator Dunlap strawberry, Beta grape, King raspberry and Wealthy apple are good fruits for the garden. Plant liberally of each.

Cut a few twigs of pussy willow and put them in a vase or dish of water in the living room. They will open up in a few days and are always attractive.

Lilac branches may sometimes be forced into bloom by cutting them and keeping in water in a cool, moist place, gradually giving more heat until the buds expand.

Plant out a few shrubs about the yard this spring. Spiraea Van Houttei, common lilac, Japanese lilac, Japanese rose, Mayday tree, mock orange, and flowering currant are all good for the purpose.

Golden Bantam, sweet corn, Swiss chard, Golden Self-blanching celery, purple eggplant, Kohl Rabi, White Japan muskmelon, Sweet Heart watermelon, are all vegetables that are worth trying.

From now on the bulbs potted last fall will be coming into flower rapidly. Tulips and daffodils may be set back in a cool place when through flower-

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C. D. Lyon, R1, Georgetown, Ohio.

Boone Co. White, Johnson Co. White. R. Y. Dent and Leaming crated, \$2.50. Shelled, \$2.00. Stored and dried in a modern seed house and thoroughly tested. Shipped on approval. Regenerated Swedish Select Oats. Cat. free.

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Reid's Yellow Dent shelled and graded; guaranteed to grow, \$1.50 per bushel. Choice timothy seed \$2.75 per bushel. John McDaniel, R. R. No. 6, Box 41, Memphis, Mo.

ing and planted in the open ground as soon as the soil can be worked. They will blossom next spring if carefully protected over winter.—LeRoy Cady, Horticulturist, University Farm, St. Paul.

The strawberry is known all over the world and was used as an article of food by the ancients.

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a quarterly magazine, devoted to special crops and intensive farming, with special attention to the care and handling of poultry. Tells how to make \$200 per acre per year on any farm from 5 to 100 acres. Good Poultry alone, 10c a copy; 25 cents a year. Copy free with every 25c order for Sunflower seed. Every poultryman needs it. Agents wanted, write today. SHOREWOOD FARMS CO., Saugatuck, Michigan. City Office — 11 N. Market Street, Chicago, Illinois.

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The Poultry Yard

PREVENTION IS BETTER THAN CURE.

Editor RURAL WORLD: As a rule, poultry are of a hardy nature, and, consequently, are not delicate until man makes them so.

If properly cared for they will remain strong and vigorous, proof of his being shown in the fact on all the large farms in care of veterinarians, sickness is seldom found among the stock.

The nature of the fowls must be studied, and every comfort given. Comfortable houses must be provided. A house should be so constructed that it will be practically an open shed during the summer, and a warm and yet well ventilated house in winter—free from drafts, and safe from the cold winds and stormy weather.

The nearer poultry is kept in a natural state, the more hardy will they be. It was this fact that led up to the invention of the scratching-shed house plan.

There is danger in houses built so tight that scarcely a breath of air can enter. Again, such places are often overcrowded, and the fowls sweat while on the roost at night, a condition that quickly brings on colds. It is safe to say that fully two-thirds of the cases of roup are due to overcrowding in close, badly-ventilated houses.

The effect of the different articles of food, as well as the manner of feeding, must be studied. To feed a diet, during the summer, of corn or other heat-producing foods, is apt to bring on a diseased condition about as quick as poor housing. Entirely too much corn, and not enough variety—a proper blending of nitrogenous and carbonaceous material—is fed. An exclusive diet of any one grain is harmful, producing diarrhea, and symptoms closely resembling "cholera." The bowels are the best indicators of condition. When the droppings are of a brownish color, capped with white, they denote good health, and it is then certain that the food is agreeable.

The present system of dry feeding is becoming more popular every year. This does away entirely with wet or moist mash, which are the cause of so many cases of overfat and bowel troubles.

Fowls must not be overfed. They should have only what they will eat up clean. The dry-feeding method, however, allows food to be constantly before the stock in hoppers. Champions of this method claim that fowls will not overfeed when dry material is constantly before them, for they eat of it only by degrees, taking with it draughts of water to wash down the food. This we believe should be allowed only with dry mash, and not with whole or cracked grains. In the latter case the amount should be limited to an average of a handful for each fowl in the pen—and scattered among litter so as to induce exercising.

Cleanliness is an important factor in maintaining health. It should be made a rule to daily gather up the droppings, and cover the dropping boards under the roosts with sifted coal ashes or dirt. Plenty of kerosene should be used on the roosts and in the nest boxes, and every spring and fall the interior of the houses should be whitewashed, and several times a year the premises fumigated by burning sulphur. The drinking fountains, too, must be kept clean, and the water never allowed to become stagnant.

Cleanliness will not only keep out disease germs, but will give a fatal blow to the prosperity of the lice. Lice

weaken poultry, and in this state the latter become easy prey to disease.

All droopy, ailing fowls should at once be isolated. For this purpose it is well to have cages built in a separate building. In many cases, a few days quiet will be more effective than medicine. A liver pill given when the fowl is placed alone, will hasten a cure. Should the condition remain unchanged, the dose can be repeated. Green food, such as lawn clippings, lettuce, or other tender greens, will greatly help along the cause.

Slight colds can be effectively treated by giving a one-grain quinine pill each night for three nights in succession.

Rare beef, chopped fine, will do wonders in toning up a debilitated fowl.

It does not pay to doctor a fowl that is hopelessly ill, or suffering from a contagious disease. The latter are never permanently cured, and will transmit their weakness to the offspring.

Prevention means a minding of all the details, it means regularity, it means system, it means comfort; in short, it means foresight.

MICHAEL K. BOYER.

CHICKEN EXPERIENCE—No. 24.

Editor RURAL WORLD: January, 1913, record: 272 eggs or 22 2-3 doz., at 20c to 25c, worth \$4.50; 23 lbs. old hens, worth \$32.20; total, \$6.70. Feed, \$2.50, viz., oats 50c, cracklings 30c, shells 10c, bran 25c, 3 bu corn, retail price per bu. 45c. I raised the corn. This January was rainy and warmer than January, 1912, an extremely cold month, of deep snows. Last January I got only 67 eggs; beat it this year 205 eggs. Always start the year with 60 hens, about one-half pullets, cause pullets got busy two weeks earlier last half of month got the most of eggs last two days of January. Got 20 eggs one day, the other 19. The last three months or fourth quarter of 1912, the egg record ran low, the hens were moulting and resting, the pullets had not commenced laying. By quarters, 1st, 1110 eggs; 2nd, 2545; 3rd, 1614; 4th, 767. Total for 1912, 6036.

From Cape Girardeau paper I take I see more Cape chickens win prizes at show. Prof. Lamb, who sent his fine Barred Rock cockerel to the International Poultry at Kansas City last week, has been informed that he won third prize on the bird. It seems as though the Cape chickens are hard to beat, as they win in every show they are entered.

Second. Colored Preacher Wins More Chicken Prizes. At the International poultry show at Kansas City last week Rev. W. W. Russell won first prize on Black Orpington cockerels, first and second on hen. He is shipping them this week to Cincinnati to be exhibited at the American Fanciers' Association.

From a great weekly I take, I see where a hen belonging to L. H. Bennett, poultryman in Kansas City, is 19 years old and has raised more than 250 chickens, laid more than 1,250 eggs, and has earned more than \$750 for her owner.

In one of the poultry Journals, a writer under the heading, "Why Anconas Are My Choice," praises that breed good and plenty. Says: When I started in the poultry business, the greatest question in my mind was the choice of a breed. There were plenty of breeds to choose from, some practically valueless as egg producers, some otherwise. It was from the otherwise kind that I wanted to make my selection. I wanted a breed and strain that could be depended upon to meet all reasonable chicken requirements. During my search I traveled a great deal and read a great deal more than I traveled. My eyes were constantly on the outlook for a convinc-

ing article, either in the press or poultry pen. My birds must be hardy and easy to raise. Must be prize winners at the shows and fill the egg basket in the shortest time. I finally decided on the Anconas. Its attractive color, beautiful form and graceful carriage at once gives it a place among the prime favorites of the coop—in the show room as well as on the table of the preacher. I have known pullets to lay an average number of 256 eggs a year for the entire flock in the cold climate of our northern states. All in all, the Ancona is the bird to raise chicks, eggs, meat, fine feathers, activity, cheer and less vermin, and they require less rations than any other breed in the world."

If all poultry raisers believed as the one who is such an Ancona enthusiast, there would be but one breed of chickens in the world. My own little flock has laid 157 eggs the first ten days in February. Weather rainy and windy. Today, Feb. 11, is the fourth annual sale of W. F. Shade.

W. O. PENNEY.

CANE HILL (ARK.) NOTES.

Editor RURAL WORLD: I have been a silent reader of your valuable paper for several years, and because of its popularity among the farmers, stockmen and poultrymen, I send my advertisement of S. C. R. I. Reds to be placed in your columns.

I have been breeding the Reds for five years. They are fine winter layers. I have seventy-five vigorous, healthy hens and seven cocks. They have free range of our thirty-acre farm. MRS. HERBERT PYEATT.

When the fattening season arrives, according to an experienced goose raiser, keeps the fowls shut away from bathing water, and feed barley meal, cornmeal and beef scraps and some chopped celery. Keep them in a subdued light for three or four weeks, when they can be let out for a couple of days to enjoy the use of a pond. Then return to clean quarters, and feed on barley meal, and milk, and chopped celery, for two or three days, letting them go 24 hours before killing.

The Apiary

BEES AND FRUIT.

This question has been discussed a great deal in farm papers and bee journals but it seems necessary to bring it up each year. Also, by the very nature of the subject, it falls on the beekeeper to do the educating along this line. So let each one of us do our part and try to get our brother farmers to understand just how much our bees are really worth to them and how much damage they are doing to themselves when they do anything that will hurt or destroy these valuable assistants. It is estimated that every colony of bees is worth not less than \$20 to \$25 a year to the farming community around them in the part they play in the fertilization of fruit and clover blossoms. If fruit and clover growers can only be made to realize that without the bees they can raise neither one of these valuable crops, it will be an easy matter to persuade them to take a little pains to not destroy the bees.

Thousands of bees are poisoned every year by orchardists spraying their orchards while in bloom, and this in spite of the fact that they are killing off their best friends. Spraying should be done just before the trees come in blossom and just after they go out of blossom. This gets the best results, saves to you your best friends, and to your neighbor the bees who make his living.—L. C. Wheeler.

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EGGS FOR HATCHING—15 for \$1.50, 30 for \$2.75, 100 for \$6.00. From Exhibition Barred Plymouth Rock and Single Comb Brown Leghorns, at Glen Raven Poultry Farm. Circular free. Address E. W. GEER, Lock Box 104, Farmington, Mo.

We duplicate all infertile eggs. White and Columbian Wyandottes, Single Comb White Leghorns, and Light Brahmas. We use trap nests. In business for 30 years. Brahma eggs, \$3 for 15; \$5 for 30. The other varieties, \$2 for 15, \$5 for 50, \$10 for 100. Address, Michael K. Boyer, Box 2, Hammononton, New Jersey.

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Inclosed please find \$.....for which insert my.....word advertisement (at 1 cent a word) as written on the sheet attached, in your WANT DEPARTMENT of COLMAN'S RURAL WORLD, same to appear for.....weeks, starting with your earliest possible issue.

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Office. Center of everything.



Horseman

Dr. W. W. Gray has sent his three-year-old stallion My Challenge, by My Dare, to Rayland Stock Farm to receive his education. My Challenge is a full brother to that queen of show mares, Gypsy Dare, and very much like the sensational My Major Dare, and in the hands of P. W. will be heard from before the curtain falls on the horse shows of 1913.

Harold Savage has a racing string of four horses quartered at the Lake of the Isles track at Minneapolis, in readiness for ice racing at that point. The lot includes Jean Arion 2:08 1-4, Lauretta Patch 2:23 1-4, Hart Patch and Direct Patch. Jean Arion appears to have recovered from a serious lameness that interfered with her work the latter part of the racing season.

The Kentucky Sales Company's ninth annual winter sale of trotters, pacers and saddle horses, with George A. Bain as auctioneer, Ken Walker, secretary, and W. J. Tracy, clerk, was concluded in Tattersall's. During the 6 days 556 horses were sold for an aggregate of \$183,855. The trotters and pacers numbered 310 and they brought \$102,505, an average of \$330.65, and the saddle horses numbered 246, they bringing \$81,380, an average of \$330.80.

Conducting a livery stable at Bucklin, Kan., is John Smith, with a standard and registered brood mare from which he is breeding, by name, Madam Vordica, bay, seven years old, by Depew 4501, son of Almont, Jr., dam Chief's Daughter by Clay Chief 11810, second dam Lady Hagyard by Captain Walker. She stands 15 3-4 hands, weights 1,100 pounds, is trotting gaited with good speed. She has a weanling sired by Princeroi and is rebred to the same horse.

E. C. Bulger, Hutchinson, Kans., owns a pacer that has been miles as fast as 2:13 1-4, and is sound and right, but without a record. It is Captain Allen, bay, foaled 1905 by Penroe 2:20, dam Lou Allen by Ellerslie Wilkes 2:22 3-4, then Captain Jenks, Draco 116, Abdallah 15, Bald Stockings and Thore. He is very stout made, weighs upward of 1,000 pounds, knocks off eighths faster than fifteen seconds, is pure gaited and level headed, being shaped up to race some of these days.

At Liberal, Kans., one of the broad gauge and public spirited horse owners is Carson Wright, who owns the bay sister to the great two-year-old runner, Frank Mullins, by Serpent, dam Chicadee, the mare registered as Harmless. She ran and won heavily as a two-year-old, but was badly out of condition this last year as a three-year-old until too late to fit and start. She is now in fine fettle and will be prepared to race the coming season. Mr. Wright is interested also with Rice Brothers in a stable of Runners at Juarez, N. M. He has a fine yearling by Headlight Morgan out of a mare with standard breeding, which carries the Morgan type fully and is a good one.

L. E. CLEMENT'S WEEKLY LETTER.

Editor RURAL WORLD: In one of the leading editorials of the Kentucky Record, of Feb. 20, the writer inadvertently displays how little he knows about the question he is trying to handle. "In a few states stallion laws have been placed on the statute books, with a view of improving the breed, of eliminating as far as possible, physically imperfect stallions, whose defects must be transmitted." If there is any state in the United States that has put a stallion law on her statute books to in any way affect the breeding of the American trotter, I for one should be more than pleased to know what state it was done in, and further, I should like to know what manner of advocates were found at work in the lobby. The greatest seed siring son of Robert McGregor, McEl Roberts, that, as a five year old trotted better than 2:15 and was shipped, by his breeder to contest in races that only a horse with speed and class has any business in, never reached his destination. A train wreck deprived him of sight, as well as disembowelling him. With a confidence few men would have had, the abrasion was sewed up, after crowding back the internal machinery and the poor blind horse went into the stud, not with the advantages of "Kentucky limestone soil, the succulency of her grasses, the water, the climate or the chemical properties," but in the cold northwestern part of the country, he made his uneven fight, until driven from his native state by the passage of a stallion law, put on the books of the state by parties interested in draft horse blood, known to have more than three times the hereditary deficit of ring bones, side bones and other exostosis of the front legs, than any other mature horse in civilization, and five times greater than any breed of ponies known, I have no objection to any stallion laws, for any state outside of Missouri, but don't for one minute advance the idea that it is to improve or protect the American trotter or the American breeder, both have too much class to need such protection.

McEl Roberts, blind at five years of age, sired twenty-nine trotters and nine pacers, and was worth more to his native state as he was, than any ten imported horses ever landed there.

On page 43 year book of the department of agriculture, 1911, I find, "Two thoroughbred stallions were presented to the War Department by Mr. August Belmont, and these have been turned over to the department, for use, in accordance with a co-operative plan. The stallions are being stood, for public service, at the renowned station at Front Royal, Va., under the direction of the Bureau of Animal Industry, and have been bred to about 50 mares. Only approved mares are bred to these stallions, and each mare owner agrees to give the government an option on the resulting foal, at three years for \$150. It is hoped that Congress will provide funds for the extension of horse breeding for the army, as it is evident that government must do something to encourage the breeding of horses of the proper types if the army of the future, is to be supplied with an adequate number of suitable remounts." Only today comes the information that John E. Madden has bought the thoroughbred stallion Ballot for \$30,000 and that he has been shipped and will arrive in this country about March 3. It is not that enough horses suitable for the army are being bred but they can not be bought at the prices the government is willing to pay. Before they began importing draft and coach horses every farmer in the country had horses suitable for the remounts, and some were ready to sell, at prices way below what the government is

paying at the present time. Since this was written, a comparison of the colts from the two thoroughbred stallions in use, with the foals by trotting bred horses, from the class of mares as Front Royal, they have bought a half dozen trotting bred stallions to put with the original stallions in use, at the station. From the same class of mares they will get nearer what they want than from the thoroughbred stallions. Yet they will not get such colts as L. V. Harkness got—91 of his averaging \$331 before they were two years of age. It would cost at least \$35 to carry them over to three years, making them worth \$366 average, at that age. Would breeders of Front Royal if using the class of mares kept by Mr. Harkness likely to elect to let the government have such three-year-olds at \$150. The foals from these trotting bred stallions the government will get will be from grade draft, coach, saddlers or ponies, and will be worth all the government will pay, but will not sell, as the colts bred at Walnut Hall, King Hill, Patchen Wilkes, the Smollinger, or a half dozen other breeding farms sell, at public sale.

On top of that, don't forget, the sale of 15 yearlings, not yet two years old, by J. Malcomb Forbs (5) 2:08 sold last week, at Lexington, Ky., for an average price of \$550. The horse business is in as good shape as any business in the whole country, and the breeder of the American trotter, in this country of Europe, has nothing to fear.

SCIENTIFIC HORSE BREEDING.

By Frank B. Graham, Kansas City, Mo.

The first thing necessary in studying horse breeding is to get a fair knowledge of the anatomy of the male and female organs. Learning the names, functions and locations of parts is easy. A little time will make the average breeder very proficient in this direction. I have heard breeders say they could not learn those big names. But they are mistaken, any breeder can accomplish this if he will only give it the proper application. Without this information the breeder is not in a position to read intelligently or to give satisfactory reasons for carrying on experiments.

It may not be generally known, but a great many stallion and jack owners, even some who have been in the business a great many years, open the mouth of the bladder instead of the cervix when they "open a mare." When a mare is opened the hand which is used in that process should be washed with soap and water and rinsed in sterilized water so that the operator will not carry any infection into the uterus. The uterus of a mare is a peculiar organ; in many cases it has a cavity from two to four inches deeper than the os uteri. Excepting through absorption, there is no way that infection bearing matter can escape from the uterus but to drain through the os uteri. Then if infection is introduced into the uterus the fluid matter may be a considerable depth before it can escape. The uterus of a mare is one of the best mediums in which to grow bacteria. It is not unusual to see a stallion or jack owner have a bucket of lard or other grease in which his hand is immersed before being inserted into the vagina, with one finger into the uterus. Others have used soap. All of these agents are injurious. Other breeders believe that it is necessary to insert two or three fingers into the cervix in order to open a mare sufficiently—some of them insert four fingers. The manipulation creates an irritation which is responsible for many mares not fertilizing. One finger is sufficient in a case of



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It is the old reliable remedy for splint, spavin, curb, ringbone, thoropin, bony growths, swellings, sprains and lameness from many different causes.

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Seldom See ABSORBINE

A big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Stifle, Knee or Throat.

Before After will clean them off without laying the horse up. No blister, no hair gone. \$2.00 per bottle delivered. Describe your case for special instructions and Book 3 free.

ABSORBINE, J.R., liniment for mankind. Removes Painful Swellings, Enlarged Glands, Gout, Wens, Bruises, Varicose Veins, Varicoseities, Old Sores, Always Pain. Price \$1 and \$2 a bottle at druggists or delivered. Manufactured only by W.F. YOUNG, P.D.F., 58 Temple St., Springfield, Mass.

Registered Saddle Stallions, and Mares, Jacks and Jennets at Auction Friday, March 7

Hamilton Brothers, of Mexico, Mo., will sell 30 registered saddle stallions and mares, 20 jacks and 10 jennets at their annual sale Friday, March 7. The offerings in this sale will include the best blood of Missouri and Kentucky, and all of them are fresh, young stuff, including a number of show prospects. If interested, write for catalog and arrange to attend.

HAMILTON BROS., Mexico, Mo.

FOR SALE Standard and Registered Trotting Stallions.

Electioneer Wilkes cross; one bay 8 years old; record 2:24 fifth heat, half-mile track. Two seal browns, 6 and 7 years old, good enough to head a farm; have state license. Colts to show, price, each, \$400.00.

H. M. MCGILVARY, SORENTO, ILL.

FOR SALE—Twenty head of Standard and Registered Stallions, Colts and Fillies, at very low prices. Write for prices and description.

COLMAN STOCK FARM, Creve Coeur, Mo.

FOR SALE—Registered Saddle Stallion, 3 years old, sired by Greatland 1403 out of Lady Gurley 2564. Sound, broken to ride and drive. A show horse. Benj. N. Sheppard, R. R. No. 2, Springfield, Mo.

EXTRA FINE YOUNG JACK

Four years past; crow black; about 14 hds. standard measure, 14 1/2 jack measure; wt. about 850; extra heavy body, short legs; fine animal, in every particular. For price and terms apply to

F. D. TERRY, P. O. Centaur Station, St. Louis Co., Mo.

THREE PERCHERON STALLIONS for Sale. One imp., 5-year, 1900 lbs.; reg., native, 6-year, 1800 lbs.; grade, 3-year, 1750 lbs.; all blacks; sure breeders. Prices reasonable.

M. T. MILLIGAN, Pinckneyville, Illinois.

Shoeing Horses

By R. BOYLSTON HALL.

To close out last edition, this book is offered at \$2.00. Send orders to author at No. 40 State St., Room 43, Boston, Mass.

PRICE LIST

—OF—

Standard Bred Trotting Horses

—FOR SALE AT—

COLMAN STOCK FARM

Creve Coeur, Mo.

WILKNUT 42923, bay stallion trotter, star, left hind foot white, 16.1 hands; weight 1250 lbs. Foaled 1903, by Red Roy 2:15½, son of Red Heart 2:19. 1st dam, Monnutta, 2:31, by Wilkeswood, 2:23½; 2nd dam, Miss Wickliffe, by Wickliffe 2520; 3rd dam Monitor Rose by Monitor 1327.

Wilknut is one of the best put-up stallions I have ever seen, for style and action he can't be beat. He was never worked for speed, but can trot fast. He can show a 2:20 gait any time. He is a sure foal getter and a grand breeder. Price \$250.00.

MONDUKE 51549, black or dark chestnut stallion trotter, star, right hind foot white; 15.3½ hands, 1100 lbs. Foaled 1909 by Baron Reaper 2:09¾, dam Alpha C. Wilkes (mat. rec., 2:24), by Wilkesmont 2:28. 2nd dam Pinafore by Abdallah Jr. 5729.

Monduke is a handsome stallion, good gaited, good headed. He has not been trained, but can show better than 2:30 gait. I think he will be very fast if given a chance, and should make a great sire. Price \$250.00.

MONITOR RUSSELL 33727, trotter, bay stallion, 15.3 hands; weight 1200 lbs. Foaled 1895 by Alley Russell 4502. Rec. 2:22, dam Monsulta, vol 13, by Sultan 1513. 8nd dam Monitor Rose, by Monitor 1327, 3rd dam Bay Dixie (dam of 3 in the list) by Abdallah Jr. 5720.

Monitor Russell is a big, strong, good looking trotter; he is a good road horse, afraid of nothing, looks like a ten-year-old. He is sound and a good stallion for any purpose. Price \$125.00.

RESERVE FUND 5302, 2:26¾, chestnut stallion, foaled 1885, by Nutwood 600, 2:18¾. Dam Lizzie Wilkes (in the great brood mare list), by Geo. Wilkes, 2:22; 2nd dam by Mambrino Patchen 58; 3rd dam by Edwin Forest 49.

Reserve Fund is the sire of 13 in the 2:30 list. He is a horse of the most perfect form, of the highest style and action. He looks and acts like a ten-year-old. He is one of the surest foal getters on the farm and should not be for sale, but we want Baron Reaper, 2:09¾, to take his place. Price, \$100.00.

WILKTELL 55018, dark chestnut trotter, 15.3 hands, 1000 lbs. Foaled 1910. By Wilknut 42923, son of Red Roy 2:15, dam Electwanda by Electeer, son of Expedition 2:15; 2nd dam by Reville 1472; 3rd dam by Strathmore 408.

WilkteLL is a nice looking colt, will be 16 hands, broke to harness. Price, \$175.00.

MONTEITH 54085, bay, two hind feet white, trotter, 15½ hands; weight 1000 lbs. Foaled 1910 by Mondorf 22009, dam Monella by Saywa 12726, son of Onward 1400; 2nd dam Lady Elliston by Elliston 5387, son of Electioneer 125.

Monteith is a large, finely formed, good gaited, speedy colt. He showed quarters in 40 seconds as a two-year-old; he will make a fast trotter and a good stallion. Price, \$200.00.

NORWELL 56440, trotter, bay, right hind foot white, foaled 1911. By Reserve Fund 5302 (sire of 13 in the 2:30 list); dam by Electeer 31500, son of Expedition, 2:15¾; 2nd dam by Reville 1472, 3rd dam by Strathmore 408.

Norwell is a shapely, good-bult colt, sound and all right. Broke to harness. Price, \$125.00.

MONKELL, bay gelding, foaled Sept. 16, 1908, 15.1½ hands; weight 1050 lbs. By Mondorf 22009, dam Monella by Saywa, son of Onward 2:25; 2nd dam Lady Elliston by Elliston, son of Electioneer.

Monkell is a very nice gelding, has been used on the road some; had no track work, but we timed him quarters in 41 at the trot and quarters in 36 at the pace. He would make a very fast horse if trained at the trot or pace. He is good gaited and good headed. Price, \$200.00.

MONJAY, bay gelding, small star and snip; two hind feet white; 15.1 hands; weight 950 lbs. Foaled 1910, by Wilkes Mondorf 22009. Dam Monjane by Wilkesmont 22022, rec. 2:25; 2nd dam Jane Wilkes by Monitor Wilkes 6692.

Monjay is a good-looking trotter, he has lots of style, speed and action. He is one of the most promising colts on the farm. Price, \$200.00.

RESERVE VICTOR, chestnut gelding, 15 hands, 900 lbs. Foaled 1910; sire Reserve Fund, 2:26¾ (sire of 13 in 2:30 list), by Nutwood 600, rec. 2:18; dam Monafare Belle by Wilkesmont 2:24; 2nd dam Monafare by Monitor 1327.

Reserve Victor is a good-looking trotter, sound, clean and good gaited. Price, \$150.00.

Twelve weanling colts and fillies by Reserve Fund and Baron Make. Price, \$100.00 to \$150.00.

These horses can be seen any day at the Colman Stock Farm. The Missouri Pacific R. R. trains leave Union Station for Colman Station on the farm at 6 a. m. and 5:55 p. m. The Rock Island train leaves Union Station for Creve Coeur, one-half mile from the farm, at 7:31 a. m. Creve Coeur electric cars leave on Olive street every twenty minutes. Get off at the lake and walk two miles up the lake.

this kind. More mares are made barren temporarily through the opening process, under the average management, than are ever benefited. It is necessary occasionally to open the cervix before a mare is served.

A careful estimate of the mares in this country that have raised colts to weaning age is one mare out of each three bred. This is a remarkable condition. There are many factors at work in this process. In all other civilized nations breeders charge a part of the service fee at the time of service, so that most of the shy breeding mares are not bred. But in the United States the "stand and suck" custom invites all mares to be served regardless of their diseased condition. The custom is so well established that I do not believe it advisable to try to make any change, for it would only make a harvest for the inferior sire. The country is full of stallions that would not even make good geldings, whose owners are willing to guarantee the colt old enough to work before the service fee becomes due.

When in communication with stallion and jack owners one would believe that the per cent of foals was anywhere from 80 to 100, but by having the opportunity of confidentially investigating a large number of service record books, one learns conditions in a more authentic way, on the subject. The low per cent of foals in this country attracted my attention a good many years ago. I sold a stallion to an individual under a breeding guarantee and the stallion did not fill it. This surprised me greatly for I had stood the horse the year before. After I had investigated this case I found from the service record book that each time following the breeding of a certain mare, several other mares failed to conceive. This particular mare (as well as others of the same kind) was examined. Since then I have been investigating this matter a great deal farther and have been able, by means of a culture secured from a diseased mare, to produce disease to the extent that she would not fertilize during that year, under any condition. In the spring of 1910 I resolved to carry this matter on from a scientific standpoint and learn more about it. I employed several expert veterinarians to assist me in the examination of over a thousand barren mares. Among those were Dr. S. L. Stewart of the Kansas City Veterinary College, who was the successful investigator in finding the particular germ that is the cause of a great many mares being barren. These germs were injected into a clean, healthy mare, and this mare was destroyed and examination showed the condition that this infection produces. This work was carried on with many subjects (mares and other animals) producing the identical symptoms in each case, and in each animal dissected the same germs were found. All of these animals were previously healthy in the genital tract so far as could be diagnosed.

It is very interesting, indeed, to inspect a clean, healthy mare, using a cervical speculum and electric light, to diagnose the condition at the time of infection and then to notice the great change that has taken place in that genital tract in five days. The investigation along this line was carried on under the supervision of Dr. A. T. Kinsley, one of the best bacteriologists in the world. A statement of this investigation has been sent to nearly every graduate veterinarian in the United States and accepted so far without any questions. The results of this investigation are probably the most important secured in all horse breeding history.

A stallion may serve a diseased

mare containing these germs and transmit that infection to clean, healthy mares as long as two to four days after copulation. It does not seem to affect the penis of a stallion or jack, as in other cases of venereal diseases. This is probably the reason that this subject was never investigated. The first thought is that the penis of a stallion may be washed to prevent conveying infection to other mares. This is impossible, as a rule, for the glans penis is expanded during the act of copulation and usually wrinkles soon after ejaculation to the extent that it conveys enough infection to be serious. There is a small place on the penis (fossi) where the bean forms that is impossible to clean without an instrument to inject fluid into it as a cleanser. This is a serious condition and the only remedy at the present time is for the stallion and jack owners to reject all suspicious mares and not breed them with natural service at least. Every up-to-date stallion or jack owner should be able to diagnose certain conditions. We are sorry to say that the stallion and jack owners know less about their business than any other professional class of men—horse breeding is a profession now days. Many a stallion and jack owner is spreading infectious disease among the mares, that means a great loss to his community, as well as to himself financially. Stallion owners who are capable of making certain examinations with a view of refusing to serve diseased mares with a natural service, can usually increase their per cent of foals from 20 to 30 per cent.

The movement to make stallioners realize the necessity of this information must first start with mare owners. If they demand more intelligence in their horse breeding operations, a great change will take place. The stallion or jack owner's business has been a "side line" too long. It must assume the position of a recognized profession before any great results in this line can be accomplished. A lot of stallions are being ridden throughout the country that have no value as producers, yet they are patronized extensively because they are convenient. I have seen the owner of a valuable mare refuse to patronize an excellent sire within two miles of his own place because a little mongrel would be brought to his barn yard without any inconvenience to him. It is this stock that prevents the purchase and use of valuable sires all over this country. If mare owners would study this situation and realize that colts sired by little misfit mongrels would be necessarily produced at a loss, they certainly would pay more attention to the selection of good sires. There are always men, who, if they can buy an animal for a song, and use it to the extent that they make better wages than they could make as farm hands, will follow that occupation. It is up to the intelligent mare owners of this country to refuse to patronize the inferior breeding stock and to give their assistance in discouraging their neighbors from raising so many horses that fill no market place, and are at the present time a drag on all the leading horse markets. The market for good horses and mules was never in a better condition. Mules are worth \$10 a head more now than they were one year ago. Horses will reach the highest price in American history before April 1st. What is the use of producing a misfit that cannot be used satisfactorily or sold for enough to pay for its production?

(To be continued.)

Run a small ad, 4 lines, 4 times for \$1 and see if you don't sell most anything. People send in inquiries for the very thing you want to sell.

HOW MARSH OR SWAMP SOILS MAY BE MADE MOST PRODUCTIVE.

(No. 3.)

Editor RURAL WORLD: Having decided what the condition is of any swamp or marsh soil as regards plant food, much depends upon the kind of crop that is chosen to be grown, whether the best possible profits are secured. It should be remembered that owing to the preponderance of nitrogen in such soils they are best suited to crops that are valuable for their stalk and leaves, rather than for their seed or fruit, hence such vegetables as celery, lettuce, onions, spinach, cabbage and some others have made most money for growers who have been wise enough to balance the nitrogen with potash, or with both potash and phosphoric acid, when it was found by actual tests that the latter was needed.

Besides such vegetables as have been named, other crops that may be profitably grown from the first are grasses and clovers, the yield of hay being large enough to insure great profit if the soil is properly prepared for seeding and fertilized with the elements of plant food that may be deficient in quantity. At Marinette, Wis., five dollars worth of phosphoric acid and potash to the acre were applied to the grain crops the year previous and four and a half tons of excellent hay was cut to the acre with no further fertilization. This is reported by the State Experiment Station at Madison, which advises that this method of increasing the yield be followed, the cost of the fertilizer being charged to both grain and hay crops, so that under that arrangement the cost is not excessive, and when the large yield is taken into consideration the price of the fertilizer is a mere trifle.

At Maple Park, Ill., the yield of millet was increased from one ton of hay to three by the application of 200 pounds of muriate of potash on peaty loam, on the farm of Louis H. Klass, the large heads and stall, leafy stems on the fertilized portions of the field being the very picture of luxuriant growth.

Oats and other cereals have shown a marked increase in yield also. An experiment was made in 1910 on the farm of Joe Dahl, 200 pounds of muriate of potash was applied to the acre on corn ground. The next year oats were sown and the fertilized field produced 53 bushels to the acre against 42 on the check plot that was not treated. This experiment was made in the interest of the Indiana Experiment Station.

Another test has been reported in which Mr. Dahl tried to learn the value of potash on wheat, when grown on muck soil. The same amount of potash was used as in the other experiment, and it too was applied to the corn crop the year previous. The result was that the fertilized part produced 29 bushels of wheat to the acre, while the untreated portion of the field produced only 19 bushels.

It would be interesting for the farmer who owns land of the marsh or muck variety to test small plots so as to determine for himself whether his crops on same could be profitably increased. There is no need to speculate on results or reckon on uncertainties. Take no one's word, but let every one find out for himself. Seeing is believing, for in spite of the fact that some people do not believe their own eyes, figures do not lie.

D. C. CORNMANN.

The Woolworth building in New York has reached its highest point—55 stories—750 feet. From its top people walking on the street look like ants, and street cars hardly as large as children's toys.

Everybody is interested in the small ad department. See what it will do for you at 1 cent a word.

The Pig Pen

MORE PROFIT IN HOGS.

An address by Harry A. Nelson of Miami, Texas, before the Panhandle Swine Growers' Association meeting at Amarillo:

My subject, how to increase the profit, is an interesting one. As I did not feel competent to tackle the subject all alone, I thought when I was at home at St. Joseph, Mo., for Christmas, that it would be a good idea to ask some of my former school mates that were excellent essay writers, how they thought I could increase the profit in pork production. One of them who happened to be a natural-born city girl, explained that the problem is easily solved by telling you how to buy the hog that lays a golden egg each day. Another city girl friend of mine who knew that I raised Plymouth Rocks, thought that she'd ask me some questions before giving her opinion, so she said: "Harry, what kind of Plymouth Rock pigs do you raise? I've never heard of them before."

Now, gentlemen, I suppose all of your Poland Chinas lay golden eggs, and as this is my first attempt at speech making, I am perfectly willing that you throw them at me, but before you do, please guarantee them to hatch. The best way that I can see to increase the profit, is to decrease the cost of raising and feeding the hogs, and as they will eat and thrive on a greater variety of food than any other animal, the problem of reducing the cost of feeding them has as many solutions as there are foods.

In order to decrease the cost of raising hogs, one must increase the number of pigs per litter. First and above all, hogs must be prolific in order to be profitable. In other words, they cannot be profitable if they are not prolific. If your hogs are not prolific, I suggest that you purchase some foundation stock from a reliable breeder whose hogs are prolific and have lots of quality. And right here I want to say that this is one of the many advantages of registered swine. By the use of the herd-books, you can trace back a family of hogs for many years and find the number of pigs farrowed in every litter. If you choose of a family that has been prolific for a long time, it is reasonable to assume that with proper care the offspring will be prolific. When the little fellows begin to arrive, the herdsman should watch closely and mark those that are not prolific, so he will be sure not to retain them in his herd and sell them as soon as they become marketable. Then he should mark those that he intends for his own use so as to be doubly sure of keeping the most promising pigs.

After you have made your selection, the next important factor in reducing the cost is the feed that they eat. As I have said before, a hog will eat almost anything, at least he will eat anything that any other animal will eat, and as he has such an excellent nose he will eat things that other animals cannot eat. Therefore the more range you give a hog the healthier and happier he will be. The very best advice I know to give a man that has a prolific herd of swine is to fence his entire farm hog tight, for by doing so he will save that which would otherwise go to waste and thus increase

Berkshire Sows.

We are offering some of our best hard sows at half their cost. Bred to Ideal's Emperor. Also some fine gilts. Fifty fine Columbian Wyandotte hens at half price. Fancy White and Brown Leghorn cockerels at \$3 each. Also Wyandotte cockerels cheap. E. J. REED. OHLONG, ILL.

Mule Foot Hogs, Shetland Ponies, Milch Goats, White Leghorn Chickens. John Dunlap, Box 474, Williamsport, O.

the profit. After you have harvested your wheat or whatever grain it may happen to be, fence in your stacks and let the pigs pick up all the shattered grain. After you have threshed they will thrive on the grain that no other animal can save. After you have sown and the wheat comes up you can get no better pasture than winter wheat.

When your peanuts have matured turn the hogs in on them and they will get fat so quickly that you will think they are not yours. By having lots of range for hogs they will take lots of exercise and work up an enormous appetite that will keep them healthy and strong. By letting the hog harvest a lot of the feed he eats the swine raiser is saved the work and expense of harvesting the crop, and both the hog and hog raiser are much better off. Another feed that one should keep before hogs at all times is plenty of salt and ashes or soft coal, so they won't eat young pigs or chickens. After they have once formed this habit the best thing you can do is to sell them, and the quicker you do it the better, as one hog quickly teaches the entire herd. It does not seem necessary to say that an abundance of pure water is absolutely essential.

J. F. Bradley of Memphis will tell you all about the best ration of pasture crops, so I'll not take your time in that line, but in spite of everything we can do there are times of the year when our pastures are not as good as they might be, and although I am not fortunate enough to have a silo myself, I firmly believe that the time is coming soon when the silo will be more common than our barns are now. It is true ensilage is too bulky a feed to raise pigs on entirely, but a little of it will do them lots of good and older hogs do nicely on it, especially if a little grain is added. In hog raising I believe that everyone should keep his most prolific mothers, and by having a good silo he can feed them through periods of short pasture very cheaply. The silo was built primarily for the dairy cow and as milk and pigs make an excellent combination, the silo will prove its profits in a number of ways.—Stockman & Farmer.

SUBSTITUTE FOR SILAGE.

Those farmers who for any reason cannot build a silo and fill it, or who have not enough cattle to feel justified in making the investment, should provide a substitute by way of a pasture. Wheat, barley, oats or rye make a good fall and winter pasture. The land must be fertile and well prepared to make the first three do their best.

Last year I raised some fall shoats on wheat pasture. They were fed about two small ears of corn each per day—one ear in the morning and one at night. At 6 months of age they averaged about 150 pounds each. I kept one sow and sold \$25 worth of her pigs before she was 1 year old. This sow has consumed somewhat less than 12 bushels of corn during her life. For the cows we also have early and late crops of rutabagas, part planted early then more in August, for winter feeding. The farmer and stock raiser who is "making good" is busy all the time and is getting pay for his work.—J. H. Harrison.

SILOS AND CHEAP FEEDING.

The silo is the best investment that can be made on the farm where dairy cows, beef, cattle or sheep are kept. It saves the corn plant, supplies the animals with succulent feed in winter and in time of summer drouth when the pasture is burned up. The silo makes feeding easy; supplies bulky feeds to balance the concentrated rations and reduce the cost of raising animals. Those who expect profits from their animals should build a silo and plant crops to fill them.

The Shepherd

SHEEP IN FARM MANAGEMENT.

One of the general—and often too legitimate—criticisms of the average farmer is that he has no system in his farm management. Lack of system leaves him with many details unattended to. Lack of attention to details in any business always means, ultimately, an inevitable slighting of the more important features, or a failure to realize nearly what has been legitimately expected.

It is true that many farmers make little or no profit out of their operations on the whole because they fail to attend to many minor points of management. One of these points which is often overlooked is that there is always considerable plant growth on the land that is not utilized except incidentally. I do not intend to enter here into an extended discussion of what is the best system of managing a farm; but it seems to me that no system is really satisfactory if it fails to provide for the full consumption of all that is grown on the land, and for converting the same, by some means, into revenue. This principle holds true in all lines of production.

In many mercantile industries today the main products of the factory are sold at cost, but the by-products, which in many instances used to be considered simply as waste, are utilized so fully that they return large profits on the entire business. With the cost of production constantly increasing, it behooves the tiller of the soil to use fully all the products of his land.

Referring to the statement made above that nearly every farm produces a good deal which is neither consumed nor utilized, what I have special reference to is this: The edges of the cornfields and wheat fields grow grass or weeds. After the grain is cut, considerable growth comes up in the stubble. Also, I have never seen a stubble field in which some grain was not left—maybe not very much, but always a little and often a good deal. Then in the pastures certain weeds and grasses grow up that cattle or horses refuse to eat. The best tilled cornfields have many tons of weed growth by the middle of August or the first of September.

If any farmer could garner and put in one place at one time all the plant growth that his land produces in a single season, but which is not ordinarily consumed, he would be astounded at the display. Now it is impossible to keep these side-crops from growing, and they draw on the fertility of the soil. They are a necessary evil if not utilized, but if used to the best advantage may be turned into a source of profit. It seems to me that any system of farm management ought to take into consideration all such incidental growth, and attempt to provide means of converting it into revenue. The next question naturally is, how can it be done? Let us consider the relation of sheep to such a proposition.

Death to Weeds.

In the first place, what plants are eaten to any degree by sheep? To one who is unacquainted with the variety and number of plants and weeds that a sheep will include in its menu, the answer is surprising. I have never carefully canvassed the number of weed pests.

There are many weeds which sheep attack readily, but to which horses and cattle pay little or no attention. These I will not take space to enumerate here, but this one point is worthy of consideration: In older settled sections of the country where sheep have

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been kept on many of the farms for several years, it is a comparatively simple matter for any observing stranger passing through to note how many more weeds and different kinds of weeds there are on the farms having no sheep than on the others.

Utilize the Wastes.

In the second place, the natural habits of sheep make them useful for gathering up all this excess growth—not only weeds, but grass and grain that grows in out-of-the-way places. For sheep do not live on weeds alone. Don't get such an idea! They must have good grass too, but not nearly so much in proportion as most other animals.

Sheep are natural gleaners and pickers. They like to keep moving about, and will cover every day any territory on which they are confined. Ordinarily if a sheep is in a ten-acre pasture it will go over the ten acres about once a day, but if you turn it out in a hundred acre pasture it will "trek" over the whole thing daily just the same.

It is because of this habit that sheep should ordinarily be confined to small pastures if there is much growth on the ground, as in large fields they will trample on and damage more feed than they eat. Keeping them in small pastures, with frequent changes to give the growth in each an opportunity to freshen up, is the best practice.

And this habit of theirs is just what makes it so profitable to keep a flock of sheep on the stubble a while to glean the grain, nip the weeds that start, and utilize the grass around the edges. The lots about the buildings accumulate a variety of growth, rank and luxuriant. Ordinarily all of this ripens and produces seeds. With a bunch of sheep turned in for a few nights on an average of every three or four weeks, a lot of "green goods" is made into mutton and the weed-seed crop reduced 95 per cent.

In practically every cornfield by the time the silk has dried up on the shoots, there are enough weeds and lower leaves on the corn (which later will ripen and fall off, becoming useless in about three weeks) to feed any where from five to ten lambs to each acre for three weeks. Each lamb will gain at least five pounds from such feed, and so there is enough usually to make from twenty-five to fifty pounds of mutton, which, at only 6 cents per pound, means a revenue of \$1.50 to \$3 per acre. The above instances do not include all that might be mentioned, but they are enough to suggest how sheep may be used with splendid results. They fit into a niche that is illy filled by any other of our domestic animals.—Ellis Rail, University of Nebraska.

"Say, John, do you remember our little dog Shep?"

"Yes. What of him?"

"He died, and we buried him three feet under the ground."

"What did you do with the other foot?"

You can reach the sturdy, reliable buyer through a small ad at 1 cent a word in our classified columns. Try it.

OKLAHOMA NOTES.

Editor RURAL WORLD: By far the heaviest snowfall of the season occurred the first and second of February, covering the ground to a depth of from four to six inches. Sleighing was the order of the day on Sunday, the 2nd, and the jingle of sleigh bells made music for the denizen of our city, extending far into the night. Both young and old were out enjoying the sport. Sleigh riding is very unusual here, as we seldom have snow sufficient and it soon melts so that the enjoyment of this wholesome amusement is rather transient. It is said that the moisture distributed by the snow will be worth a million dollars to the farmers. To wheat it will be a great benefit. It melted slowly—really it has not all melted yet—every drop being taken up by the soil. Last Sunday the thermometer registered in the neighborhood of zero, as bursting and frozen water pipes attested.

The outlook for good crops in this portion of Oklahoma could hardly be better. There has been cold weather enough to slay millions of injurious insects, and the alternate freezing and thawing has mellowed the soil to a nice working depth, and the farmer who had his fields plowed will reap a far greater reward financially than the fellow who neglected to do so.

The groundhog tradition is in our favor this year, as he, if he came out of his hole, failed to see his shadow, as the sun was obscured by heavy clouds all day long, and do you notice that we have a very early Easter, coming forty days after groundhog day this year of 1913.

I am still interested in farming. I have 80 acres good cotton and corn land, 65 in cultivation, rented for a third and fourth share rent. Fifteen acres to be planted to corn and Kafir and the remainder to cotton. I think I have an honest, industrious man in charge, as when I visited it in the last days of December I found that he was having plowing done. I liked that, as we have long ago learned that fall and winter plowing will give better results than spring plowing. This farm is located 3 miles west of a good town on the Katy railroad. I like the country and regret that I couldn't live there, but my son is teaching manual training in the High School at this place and will probably continue in his profession, which disqualifies him for practical farming and it is impracticable for me to go to the farm alone, thus necessitating the employment of renters. I have with one exception been very fortunate in acquiring good honest, industrious men, and one favorable characteristic my renter this year has over any others I have had, is that he has considerable civic pride. He was busy fixing fences, cleaning up the premises and planning to put his surroundings in neat order. The yard and house was clean and orderly, the reverse being the rule last year. I carried away a feeling for those people that under ordinary circumstances I could not have done. I felt that I could trust them with my farm affairs without any fear of dishonesty or slothfulness on their part.

Several years ago I sold the old home place I used to tell you about. It had run down very much and looked like a wreck beside the habitation it once was. My beautiful yard was a straggly dead mass of anything but beauty. Many of my flowers, shrubs and plants had died out for want of care. My renter, a good man, had all he could do to attend to his farming, and the wife was kept busy with her several little ones and her housework, to give very much care to the yard. Spring floods had washed many unsightly ditches in the fields. Extra

INCORPORATED 1901

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In the season 1912, the Cornbelt enlarges credit to our "right way."

Without commercial fertilizer the Tower Surface System gave the results always claimed as shown in prize contests and special efforts. At the Iowa Corn Contests the following prize-winners were users of the TOWER:

I. E. Proudfoot, Altoona, Iowa, grand sweepstakes, best 10 ears corn any variety, used both pulverizer and cultivator.

Earl Zeller, Cooper, Iowa, whose yield on one acre was 141 bushels, used the Tower Cultivator.

Ivan Houser, Farmer City, Ill., used the Tower Cultivator on 7 acres with average yield 117 bushels per acre—1 acre 122 bushels.

Chester Yarnell, St. James, Minn., used the Tower Cultivator on one acre, with yield, 103 bushels.

(Space does not permit mentioning many others.)


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Mr. Farmer—Your cultivator should bear our name "TOWER" on the tongue. Let us send our free literature.

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work was needed on every hand. I could not do it, so the next thing was to sell it, which I did advantageously.

It is distressing to have to sit and see a farm go to wreck for want of care, and before I will allow it I will sell the one I own now. As a farm decreases or increases in value according to the care it receives, and there is as a rule no tenant who will tend and keep up a place as I would. I realize that many owners of good farms are not farmers in the true sense of the term, and I believe and hope the time is coming when compulsory farming, I mean all it includes, will become a law and be as rigidly enforced as our tax laws or any other "nondodging" law, but as my article is growing too long, I'll give my views and that of many farmers of my state on this all important subject later.

I wish to give C. D. Lyon the welcome hand as Associate Editor of our best farm paper. I am sure no better man could have been chosen for that field of work.

I was glad recently to see several of the old writers present in the Home Circle. Where is Ina May. Haven't noticed anything from her pen for a long time. Has she become a great writer under a different nom de plume, and hid herself away to other fields? Somebody who knows, please explain.

With best wishes for the future of "our paper," and especially "good luck" for the year 1913.

El Reno, Okla. A. GREENER.

INOCULATE YOUR SOIL WITH SWEET CLOVER PLANTS.

Editor RURAL WORLD: We will start out on a new enterprise this season, offering to our friends of the RURAL WORLD sweet clover plants. This will be somewhat of an experiment with us. We believe that the best way would be to start sweet clover by setting out plants of one year's growth. One plant to every 5 or 6 feet square would be sufficient. One would not need very many plants to start a nice patch. These plants would produce seed this season. The seed should be allowed to fall to the ground and be permitted to come at will. The plants may be set out during March, April and May. The plants can be sent by express or parcel post. We will prepare these roots for shipment and allow a little of the bacteria soil to cling to them to help make the root growth a success. Now, friends one and all, here is a chance to start you in sweet clover that no doubt will prove very satisfactory indeed. Also, as soil from an old well-filled bacteria, sweet clover field is recommended highly by those who have tried it, we will fill orders for sweet clover inoculating soil at reasonable figures. That soil inoculation is a good thing we have proven to our own satisfaction in a field where no alfalfa or sweet clover had previously grown. We used soil from a sweet clover field, applied same, worked

well in the soil and sowed thereon alfalfa. We did not sow the soil all over the field. When the alfalfa was about 12 inches high it began to turn yellow and die down, but on the part of the field where we had inoculated with sweet clover inoculation, the alfalfa grew thrifty and did well, so much for experimenting. We would advise those who are desirous of getting sweet clover started and probably have failed before from lack of inoculation or lime in the soil, that to give this plan a trial, try it in a small way this season and if you find it does well you can go into it more largely next spring. We do not hesitate to recommend this plan because we honestly believe it will prove of untold value to all who will make the trial.

There is so very much land that needs a builder and something should and must be done to counteract the run-down cropping system and we will recommend this plan, believing it to be a more successful way than seeding in some cases. However, where seeding succeeds well and good, but where seeding has failed from any cause, we say try the plant method; it will bring quicker results. By one year this means much where land is already poor, as the sooner we can get a builder to work on such the better it will be. We would advise the inoculating soil to be drilled in and covered so the bacteria will be protected. See our ad in this issue for plants. Yours for soil improvement.

SAYINGS.

By Jacob Faith.

To me it looks like a mistake to put a costly coffin in the ground never to be seen again and not mark the grave with a tombstone.

When the rich come to die they part with their wealth which will not buy eternal happiness in the beyond.

Years ago it was predicted that the world would come to an end and the time was set. Now, although nearer, nothing is said about it.

"INVINCIBLE, UNSURPASSABLE, WITHOUT A PEER."

Writes a regular subscriber, who has read it for many years, of the TWICE-A-WEEK issue of the

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"That's just the difficulty," answered Miss Dimpleton. "He's one of those dreadful men who know enough to correct your mistakes, and who don't know enough not to do it."

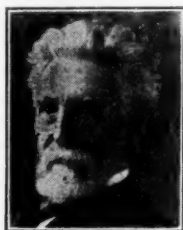
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The RURAL WORLD is published on the cash in advance system and the paper is stopped when the time paid for has expired. If subscribers receive a copy with this notice marked, it is to notify them their time has expired and that we would be very glad to have prompt renewal. While our terms are One Dollar per annum—a low price considering the high quality of paper we use—yet so anxious are we to extend the benefits that we believe the RURAL WORLD confers on all its readers that we will for a limited time take subscriptions, both new and renewals, for 50 CENTS A YEAR. "Once a subscriber to the RURAL WORLD, always a subscriber." Farmers can't get along without it. Please remit P. O. money orders, or checks on St. Louis banks, as our banks all charge five cents for cashing local bank checks, however small. We appreciate the kind efforts of our patrons in all parts of the Union in speaking good words in behalf of the RURAL WORLD, and it is to these efforts we attribute our constantly increasing circulation.

The co-operation of reputable and responsible concerns, through our advertising columns—firms whose products and methods are creditable, and upon whose representations our readers may rely—is respectfully solicited, that our advertising pages may be really representative of American Manufacturers and their goods.

Contributed articles, communications, etc., on pertinent subjects, are invited. The Editor assumes no responsibility therefor, however, and their publication in nowise implies editorial endorsement, beyond the Editor's belief that frank and courteous discussion of all questions within the province of this journal is to the best interests of our readers.

Entered in the post office at St. Louis, Mo., as second-class matter.

It will pay you to raise the best dairy calves.

A little paint in the spring makes your buildings look better and more durable.

Don't neglect your garden. Spring will be here before you realize it. Get your seeds now.

Whitewash, ventilate and properly light your stables; look after your harness repairs before the spring rush is on.

The time to dehorn cattle is in the spring and fall. If you have not already attended to this you should do it at once.

Parents should visit the schools often enough to keep in touch with both teacher and pupil. It will result in great good to everybody concerned.

If your tools are not sharp you cannot do a good job. You cannot afford

to waste your time with inferior or half sharp tools. Get abrasives that are far better than emery and your troubles will end.

The various bills now before the Missouri Legislature to aid and improve rural school facilities bids fair to place Missouri where she belongs as an educational center. This state has too long boasted of low taxes which has made her a laggard in the most essential development of her people.

The people of the United States are said to have saved \$300,000 in the first month of the operation of parcel post, and will save five million a month by the end of this year. The law can be made even more effective when amended. Why not take advantage of this great saving in the mail order business.

You can't support your family on 35-cent dollars. Yet that is what the farmer is getting for every dollar's worth of food supplies he markets. The farmers have the matter in their own hands. With organization, co-operation and the aid of the legislatures which they can secure when organized will soon do away with the middleman and give the farmer plain justice. Golden Rule co-operation is the key.

Representative Akin of New York has introduced a resolution in the House to authorize the secretary of agriculture "to purchase six thoroughbred turkey buzzards and ninety-nine thoroughbred humming birds for breeding purposes. The resolution recites that whether the result be gnats or fleas, the secretary be directed to report to Congress whether such an experiment would be more valuable to the American farmer than the department's present experiments of breeding zebras to Missouri mules, the offspring of which, Akin claims, "is a cross between a North Dakota jack rabbit and an Australian kangaroo."

The Madison Co., Ill., Soil Improvement Association, organized to promote agriculture, was perfected at a meeting in the office of J. U. Uzzell, county superintendent of schools, at Edwardsville recently in connection with the Madison County Boys' Corn Club. About 200 persons attended the organization meeting and plans will be perfected at two committee meetings this week. The association is an idea of Supt. Uzzell to restore, conserve and perpetuate the soil resources of Madison County and increase the crop yields. Supt. Uzzell presided. He said with like organizations throughout the country the movement would cause a reduction in the high cost of living.

Migratory birds are likely to get the protection of the interstate commerce principle. The Senate has passed with a unanimity the House is expected to show a bill taking them under the federal wing. If it becomes a law, the shooting of birds having the migratory habit will be prohibited in all the states. It is now in some, but there is no uniformity in the laws. Consequently birds protected in this section are killed and sold for food in the South. The slaughter is tremendous, and oftentimes shocking. As a mere monetary proposition it will pay to save the insectivorous birds. They more than earn their living by the good work they do North and South.

An annual publication covering a wide field of scientific economic investigation of the occurrences of metals and mineral fuels is the "Contributions to Economic Geology" of the United States Geological Survey. This publication is issued in two volumes, Part I treating of metals and Part II of coal, lignite, petroleum, and natural gas. Part II of this publication for 1910 has just been issued by the Survey as Bulletin 471 and comprises 663 pages. It contains 27 chapters, seven of them re-

lating to oil and gas in Kentucky, Alabama, Wyoming, and Utah, and 20 relating to coal and lignite fields in North Carolina, North Dakota, Montana, Wyoming, Colorado, New Mexico, and Utah. A copy of the bulletin may be obtained free on application to the Director of the Geological Survey, Washington, D. C.

Surface cultivation of corn is proved by the experience of last season's corn contests to be of supreme worth. The practice of this theory increases the yield without the enormous expense which is incurred in the cases of unusual returns from the use of expensive commercial fertilizer. The surface system of stirring the ground kills weeds and saves moisture as well as guarding every corn rootlet so that the ear has the full nourishing force of all the roots. More millions of bushels of corn will follow the general use of this theory this season.

Americans are drinking more whiskey, smoking more cigars and cigarettes and chewing more tobacco than ever before in history, according to the latest tax returns to Royal E. Cabell, commissioner of internal revenue. From July to February the nation has consumed 94,000,000 gallons of whiskey, an increase of 5,000,000 gallons over the corresponding year; 3,500,000,000 cigarettes, an increase of 2,250,000,000; 4,500,000,000 cigars, an increase of 250,000,000 pounds of smoking and chewing tobacco, an increase of 12,000,000 pounds. These are record-breaking figures. In addition, drinkers of beer are resuming their stride. During the fiscal year 1912 the consumption of beer fell off materially, but the first seven months of the current fiscal year the people of the United States have drunk 38,864,000 barrels, an increase of 1,850,000 barrels over last year.

The sixth demonstration on the Iron Mountain tracks has been located at Arcadia, Mo., on the grounds of the Arcadia College, adjoining the right of way of the railroad. Rev. Father John Adrain of the college, who has been a student of scientific farming for some time, will be in charge under the general supervision of L. A. Markham, commissioner of agriculture for the Iron Mountain. Eighteen acres will be placed under cultivation at once, and within a year or so the farm will be extended to twenty-five or thirty acres. The business interests and residents of Arcadia united in a movement to have the railroad select this site. The farm will also be used in conjunction with the course in agriculture included in the college's curriculum. A specialty will be made of fruits, particularly apples, which, it is believed, can be grown successfully there as in Southwestern Missouri and Northwestern Arkansas. Small fruits, such as grapes and berries, particularly raspberries, will be raised, and vegetable farming will be a feature, as the ground is ideal for that purpose. Corn, oats, clover, alfalfa and other staple crops will be given attention and a systematic plan of crop rotation will be employed. Methods of improving soils and increasing yields will also be a feature of the work.

TOTALLY UNWARRANTED.

We, the Joint Committee of the Senate and the House of Representatives on Agriculture, to which was referred a resolution preferring charges against the State Poultry Board and its secretary, T. E. Quisenberry, beg leave to report that we have fully investigated the same and find that they are totally unwarranted in fact, and fully exonerate the board and its secretary of such charges and heartily commend the efficient manner in which Mr. Quisenberry has conducted the affairs under his charge. Respectfully submitted, Anderson Craig, Chairman.

NOTES FROM AN OHIO FARM.

By C. D. Lyon.

The other day I went to a sale about seven miles from home, not with the idea of buying anything, but to see the people, as it was a very large sale.

It is amusing to see what an effect "on all sums of \$5.00 and over a credit of nine months will be given" has even on men who have money in the bank and could pay cash for all they buy.

One man bought some things he did not want, just to bring his purchase over the \$5.00 mark, so he could get the nine months' credit, and every man who made a bid, was bidding against three or four such fellows.

Things sold well at this sale, as they were nearly all but two or three years in service, and owing to the credit given, some things sold at the price of new.

I once went to a sale and bought an old wagon for \$6, and concluding to take advantage for once, of the credit extended, asked a man whom I had favored a good many times when he was so poor that he smelled bad, to go on my note. He had married some money, so he promptly refused to accommodate me, but the clerk of the sale, who saw the affair, said, "Come on, Lyon, you don't need any one on your note for \$6." This was the only time I ever sought credit at a sale, and it will be the last, but I was always glad I did it, as it gave me an insight to the character of a very mean man.

Giving security is a risky business, and no man should ever so involve himself for others, as to injure him seriously should he be called on to pay a security debt, but with all due deference to the opinions of others. I have always felt that my duty to my fellow men sometimes made it necessary for me to put my name on their notes, and in a pretty long experience I have never had such a debt to pay.

One time the bank cashier told me that I might expect to pay a \$20 security note, so I went to the man I had favored and asked him. The note was for 100 days, and he said that he would have to ask me to help him renew it for 60 days, but I just handed him \$20, told him to go pay that note and owe it to me. In just three weeks he met me and handed me my \$20, insisting on paying interest, which of course I would not take, and he is my friend for life.

On the other hand, I have had to accept the favor of security on small notes a few times, but in every case the notes were paid a few days before they matured, and after a time the banker told me that I did not need security any longer.

The man who always protects his credit will soon find that he can get a favor when he wants it, but the man who allows his paper to become overdue, will find that it is impossible for him to get credit without good indorsement.

I never heard of as many February pigs before, and those having sows farrowing February 5 to 20, say that they have saved nearly every pig.

One man has an even 100 pigs from eleven sows, another 60 pigs from six sows and still another 59 pigs from five sows, while one man reports 25 strong, healthy pigs from two sows.

Stock cattle and milch cows are scarce and high, good cows selling up to \$90 each, while horses of 1400 to 1700 pounds weight are higher than ever before, selling up to \$300 each.

Butter fat is 33 cents, butter 27 cents, eggs 18 cents, clover seed \$12 per bushel, timothy seed \$2.50 per bushel, corn 60 cents per bushel, wheat \$1.07, seed oats 55 cents, potatoes, 75 cents, hens 12½ cents.

Some land has changed hands at \$40 to \$125 per acre, according to quality and location, but I do not think land values are quite as high as a year or two ago.

Hired hands are getting from \$22 to

\$30 per month, and board, day laborers \$1 to \$1.25 per day.

There is considerable work being done, as fine tobacco is selling high, and a good many men are clearing up hillside thickets, that they may grow a better grade than the old land makes.

We have some land that always makes the best grade of tobacco, but will not pitch a large crop. Harry sold his crop at 16 cents per pound, the best price paid in this district.

IS IT BACK TO THE FARM?

Editor RURAL WORLD: Five farm sales by men who each own 80 to 140 acres of land and are just out of debt. Five farmers moving to town, all with the idea of living easier than they have done in the past. Five tenants taking the place of five land owners, five new families in as many neighborhoods. Five more households in the town of 2,000, five more men, sitting around grumbling at taxes.

Five farmers' wives bidding goodbye to the neighbors, five flocks of poultry, and five little dairy herds sold. Five families of children, new to the town, and to the pitfalls and dangers which come with town life.

We could go on and on, and in a score of paragraphs enumerate as many changes in the life of all the members of these families, but these are enough to set us to thinking; what will the end be?

For a time our friends will all be busy, setting things to rights in their new homes, and adapting themselves as well as they can to the changed conditions they have to meet, but every evening thoughts will turn to the country home, and many a pillow will be wet with tears.

It is hard to break the associations of a life time, and for a few months, old neighbors will stop as they drive by to speak a word or two, and the country boys and girls will drop in for a few hours when in town, but it is only the question of time when the old friendships will be broken up and the families drift apart.

Asking the needs of these families as to what they propose to do, one thinks he will start a feed store, one will probably go into the grocery business, another may buy out a livery stable, while still another may sell farm implements. All this in a town where each and every business of the kind is overdone, or if not, in the hands of men engaged in it for years.

I cannot see where the end is to be, for what I mention as happening near my own home is going on all over the country, and the towns are filling up with retired farmers, big and little, while the country is losing population.

Why a man who is able to do even four days' work in a week, would sell his stock and personal property, often at a sacrifice, rent his farm and move to town, is something I cannot understand, and as I talk to scores of men who have done so and are dissatisfied, I would like to plead with my brother farmer to stay on the farm.

Mo. E. B. NELSON.

FIRE VS. FERTILITY.

By C. D. Lyon.

Doctor Stoner, Superintendent of South Dakota Institutes, makes a strong fight against the practice of burning corn stalks, and tells how, when he was a boy in Missouri, the Stoner family smokehouse, an old log structure worth less than \$25, caught fire and was totally consumed, together with about \$7.50 worth of meat which it contained.

After telling of the gloom which the incident cast over the family, and of how they all stood tearfully for an hour at the scene of disaster, the doctor says, "Then father and I sneaked off, into the north field, and there burned up \$365 worth of fertility in

the shape of ten acres of cornstalks, and not a tear was shed."

I have never heard the matter presented in a more forcible manner, as the actual fertility value of an acre of cornstalks varies from \$3 to \$5, not taking into account their value as humus when well rotted, which in a section of limited rainfall like South Dakota may be half as much as their value as plant food.

Less than twenty years ago Sanborn, then of Missouri, was laughed at for suggesting that the stalks were worth more than half as much as the corn which grew upon them for feeding, and now Stoner goes him one better by pointing out their value as plant food, but it is easily possible to save them, both as stock and plant food. The silo does it.

NOTES FROM AN ILLINOIS FARM.

Editor RURAL WORLD: We have received that crate of "Johnson County White" from Mr. Lyon, and as the darkies used to say, "I have a crow to pick with him." He sent me only 67 ears for a bushel. Of course there was full weight, but I usually get from 90 to 100 ears, so I am about 20 cobs short, and cobs are so fine for the Mrs. to start fire with. And not only short in number, but the 67 cobs weighed exactly 10 pounds, so I am 4 pounds short on cobs.

By the way, I believe 68 pounds of ear corn make a bushel in Ohio. I have sold hundreds of bushels at retail in northern Ohio, but am not quite sure.

Well, if Mr. Lyon will pick out smaller ears (the smallest weighed 12 oz., the largest 18 oz., after being "tipped") and leave a little more moisture in the cob, I will forgive this first offense.

A neighbor has boasted several times to me that he shelled 90 ears that weighed a bushel, but I called him up last night and took the starch out of him. He is an old "Buckeye," so he came back at me with "You can't trust a Buckeye."

I wanted to attend a sale on the 13th, but will be obliged to attend a meeting of the directors of our Fair Association. Then I want to attend a meeting of our County Farmers' Institute on the 22nd, but have promised to act as clerk at a sale on that date.

As Mr. Lincoln used to say, "That reminds me of a story." By the way, did you know that Mr. Lincoln and I are very much alike in some respects? He was born in Kentucky; so was I. He was not considered very handsome, neither am I. Then, in some things we were unlike. He was a great rail splitter. I never made but two rails in my life. He was a great wood chopper; I keep a light axe, and my wife splits the kindling. He got to be president; I haven't. But to go back to the story. We were at choir practice, and, about the middle of the practice, several young ladies arose and asked to be excused, as they were obliged to attend some other meeting at that hour. The leader reluctantly excused them, and, as the door closed, he remarked: "Some people try to spread themselves over so much territory that the coating is very thin," and I would not be surprised if your readers should say to me, as the prophet to David, "Thou art the man."

We acknowledge that this has little to do with "increasing the yield," or "maintaining the fertility," etc., but you know "all work and no play makes Jack a dull boy," and I sometimes think that a little more of the right kind of play might help to keep Jack on the farm. We put this idea into practice today by taking wife and little girl walking across the fields a mile and a half—it was too rough and cold to ride—to spend the day with some good friends. AGRICOLA.

Feb. 12.

Australia has taller trees than California.

ITEMS OF INTEREST.

W. H. Yale, the east of Auxvasse mule and cattle man, sold Col. Harry Gillen, of St. Louis, 20 head of extra good big mules last week at a price reported to be something like \$300 around.—Armstrong Review.

C. K. Martin of Marsondale farm is shipping out his silage fed cattle this week. He says that any doubting Thomases on the silo proposition can be shown the benefits of the silage feed if they will only see his cattle.—Doniphan Prospect-News.

I. D. Crosswhite lost a valuable four year old filly Monday, of what the veterinary called spinal meningitis, or the same disease that killed so many horses in Kansas last fall. He had been offered \$200 for the animal just the day before it died, but Mr. Crosswhite held the horse at \$225.—Centralia Guard.

Last fall the Glasgow Canning Co. offered three prizes for the grower showing the greatest yield per acre, and delivery to the factory in the best condition. A committee of stockholders, appointed for the purpose, has awarded the prizes as follows: First, Luther Lewis, \$20; second, Fred Nordmeyer, \$10; third, J. C. Maddox and Wm. Cazzell, \$5. The growers received an average of \$80 per acre for their tomatoes.—Glasgow Missourian.

It was lately reported that no mule footed hogs were dying of cholera. Harp Brothers of Lone Jack want to satisfy themselves on the subject. The Pleasant Hill Times says that they received a pair of these hogs from Ohio. The hogs were taken to Platte county and are running with a herd of porkers which are cholera infected. If they die of the disease the Ohio man gets no money for them, otherwise the Harps are to pay for them. The experiment is watched with a great deal of interest.

As soon as the University of Missouri develops strong men in any special line of study other institutions which have more money bid for them and usually get them. The University of Missouri has been a preparatory institution for many of the great Universities of this country in that regard. During recent years she has lost a number of her best men simply because she could not pay the salaries offered elsewhere. Missouri should do a better part by her state institutions.—Boonville Republican.

The cream and dairy business of this county is reaching such proportions that it will soon be, if not now, pertinent to talk co-operative cream delivery routes. There are communities now that should co-operate in delivering cream, so that the cream may be shipped in good condition and the highest market price obtained. These routes are common in the states where the dairy industry is developed. Not only do the patrons of the routes send their cream in by the carrier, but the carriers bring out orders of merchandise for the patrons.—Bolivar Herald.

The fact that so many farmers are thinking of putting up silos the coming summer is one of the most encouraging indications of progress we can imagine. When every farmer in Daviess county has a silo, droughts or partial crop failures will have lost much of the present significance. Much corn and other crops that now go to waste because of unfavorable climatic conditions will then be converted into feed that makes fine beef cattle, hogs and sheep top the market. And when fed to dairy cows, the milk supply is greater than when they are on June grass.—Gallatin North Missourian.

The big combination sale advertised by the New Bloomfield Saddle Horse Co. has been called off for the present on account of not getting as many entries of high class horses as anticipated. The list could have been easily filled with stock but enquiries from buyers at a distance for high class

horses showed the boys that buyers from a distance looking for show horses were going to be more numerous than they could get horses to fill the demand at present, hence it was decided to hold the sale later and avoid disappointing parties who attend from other states.—New Bloomfield News.

Earl Rusk has been selected as farm adviser of Audrain County at a handsome salary of \$2,000 per year. Probably Audrain could not have made a better selection for the place than Mr. Rusk. A graduate of the Agricultural College of Missouri, experienced as a farm manager and possessed of a bounteous fund of good common sense, he comes to his new position splendidly equipped for the service of the Audrain County farmers. He is the son of Mr. and Mrs. W. H. Rusk, of Windsor, a Windsor boy of whom we are all proud. We hope his work in Audrain may be eminently successful.—Windsor Review.

The Carthage good roads club last year bought a couple of hundred King road drags and gave them away to farmers all over the county as fast as they were asked for. According to officials of the organization it was the best single move that has been made for the good roads cause in Jasper county. That county already has the best roads in the state, but the road drags improved the general standard of excellence by a very considerable per cent. The King road drag is the worst known enemy of bad roads. It might be a good idea for our commercial club to try some similar plan to get the drags into more general favor in Dade county.—Greenfield Vedette.

Chris Smith, whose reputation as a corn breeder is being extended to almost the four corners of the earth, was in Boonville Monday and received five blue ribbons and one red one from the state board of agriculture. These trophies represented at the recent state corn show held at Columbia the following exhibits by Mr. Smith: the best ten ears of white corn, the champion ten ears, the champion ear, the grand champion ear and the second best yield per acre of corn in the state. This is a record very few exhibitors have ever made at the state show. In addition to this, Mr. Smith won on his exhibits of timothy, clover, grass, and orchard grass at the international show held at Columbia, S. C., recently. We are constrained to say, hurrah for Chris Smith and his corn.—Boonville Republican.

C. W. Lawrence, manager of the Foos Dairy Farm, South Charleston, Ohio, was accorded the first prize of \$10 for market milk exhibited at the convention of the Ohio State Dairy Association, held at Ohio State University, February 13th and 14th, his exhibit scoring 96 points. He also received a similar award for market cream, with a total score of 96.5 points. The exhibits this year were of unusual quality, and the scoring consumed considerable time, many of the decisions being so close as to demand finer scorings than have heretofore been practiced.

STEWART POWER SHEEP SHEARING MACHINES.

The day of the old hand-shear is past wherever wool growing is conducted on a modern business basis. The machines shear so much faster, with no injury to the sheep, and secure so much more wool from each animal, that they are recognized everywhere as the only profitable means for doing the work. The average plant will pay for itself during the first or at most the two first seasons, and as only the best materials are used in the Stewart machines they will last indefinitely at practically no expense. Write the Chicago Flexible Shaft Co., 612 La Salle avenue, Chicago, for catalogue.

Home Circle

Written for THE RURAL WORLD.
SOME THOUGHTS.

By Mrs. M. H. Menaugh.

Tired am I of all the toiling,
The pangs and stings and weary strife.
The ins and outs, and endless moiling
That tend to constitute my round of life!
Tired indeed of the snow-clad morn-
ing,
When the hills are linked by frosty ropes.
Tired of the trials that without warn-
ing
Crush to the earth my choicest hopes!
Tired of the sound of women wailing,
Weary of the clang of the closing tomb.
Fretted by tears and loss and ailing,
Seeing no light amid the gloom.
Tired, indeed, of the lowly places,
Wishing at heart for a better day.
And never seeking to find the traces
Of the saints and heroes who went the way!
Sighing for peace and for earthly glory,
Would bay and laurel serve me well?
'Twas the homeless monk in the old-
time story
Who was greater than the Abbot in his cell!
Courage! Courage! I will count my blessings!
Some sunshine I have, tho of feeble ray,
While no costly flowers know my car-
ressings,
The sweet brier blossoms along my way!
Courage! Courage! I'll take as it is given,
Rally on the colors! bear the battle's brunt.
If the conflict goes against me—from
His post in heaven
God will rush reserve forces to the front!

Written for THE RURAL WORLD.
TO OUR FOLKS.

By C. D. Lyon.

Yes, yes, I know I spent three days in St. Louis and did not get to look up the old set of Circlers and Twinklers, but the editor-in-chief can tell you that we had a whole lot of important matters to discuss, matters relating to the future welfare of the paper, and that we really felt that three days was too little time to do it in.

Business affairs called me to pass Mrs. Menaugh's home, and of course I stopped in for a little while, but she was the only Circler I met while in the city.

The editor had me out to his home for dinner one evening, and as I had my usual full grown appetite along and again, as one of the chief dishes happened to be "finnan haddie," Mrs. Editor can testify that I am a first-class feeder.

Then after dinner the music, real old fashioned singing, in which every member of the family is an expert, kept me so late that I missed an en-

NEW BEAUTY IN ONE WEEK

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gagement down town, but I met it next morning.

As one of the editors, I took a look over the contributions in the office and am glad to see the old writers gradually getting back with us. What we need is, not so much long articles, but a good many short ones right to the point, and from all of our old contributors.

Short descriptive papers, incidents, stories, experiences, instruction, anything readable, including corn, a little verse, of well written, but few verse writers know that almost every editor's desk always contains "poetry" enough for six months ahead, and all verse is not poetry.

More in a few weeks.

SPRING HOUSE WORK.

By Early Alice.

As the tiny spears of grass begin to appear and wild flowers peep from under last year's leaves we housewives bestir ourselves to make the home nest over, to freshen up things; in other words housecleaning time is here. In Texas, no doubt, we begin this work much earlier than our friends in Missouri. Last week, while it was too muddy to work in the yard among the flowers, the old furniture was cleaned up. The dresser drawers were taken out, handles taken off to make the work of sandpapering easier. Every piece of furniture was first sandpapered till old varnish was off, then wiped carefully with cloth wet in turpentine to take off the dust. A good varnish stain was used which made my "Old last year's rags" look just like new. Only one piece of furniture was undertaken at a time. It was set in an unused room (front spare room) where no sweeping nor dusting was done till the varnish thoroughly dried. If good varnish is used it dries quickly.

The next work on the plan of work card is to paint the woodwork in the dining room and paper the sitting room over. The wall paper is not old nor is it faded but is a color that is not good for the eyes. From this time, henceforth—forever, no high priced paper for mine. One needs a change often, at least. I grow weary of looking at the same old design so will use neat, cheap patterns and paper the rooms offener.

Some of the other work towards housecleaning was the making of new pillow ticks. The room was tightly closed when the old pillows were emptied yet they, the feathers, acted like live things. Right here let me tell you about saving chicken feathers this year to make floor-pillow stuffing. The feathers that were used to fill the new ticks were goose feathers but I made a new floor pillow using chicken feathers. Last year all the Buff Orpingtons that were killed were picked of the nice small breast and back feathers and the feathers put in a sack till a flour sack was crammed full. One day last fall the feathers were scalded in clean boiling soap-suds and rinsed through two clear waters. They were hung in the sun for weeks till no bad odor was to be detected—now presto! a nice, puffy pillow.

Written for THE RURAL WORLD.
A LITTLE CHAT.

By Prudence May.

Only recently I have again entered the ranks of the RURAL WORLD readers, and first thing I did when I received the first copy of the paper was to turn to the Home Circle page, but, alas! all new names greeted me. Since then I have been pleased to read contributions from the pen of several old contributors. Wonder how many will recognize Prudence May?

W. O. Penney and J. M. Miller both wrote such interesting things of "Ye Olden Time." "Goose Quill." I should like to shake hands with you because you are merciful to your horse. I love a horse better than any other do-

mestic animal, and I dislike to see it abused. When I see a poor, patient horse tortured by an overhead check rein, I feel like taking it off the horse and putting it on the master. When we lived on the farm I had a nice driving horse of my own and really I think he had more than ordinary horse sense, for I talked to him just as I would talk to a person, and he seemed to understand what I was saying to him, for he always obeyed me.

Helen Watts McVey, your head is level on the woman question. Miss Annie Hoffarth, yours is a familiar name, and what has become of Mrs. C. S. Cornman and a host of others whose names are familiar Home Circle words? I will not make this too long, for I may come again soon.

Point Marion, Pa.

JACOB FAITH WRITES HIS OWN FUNERAL SERMON.

By Jacob Faith.

This is what I would say were it possible that I could preach my funeral sermon:

I was born May 3, 1836, in Europe, in Germany, near the Rhine, kingdom called Biren. When I was 4 years old my father, Jacob, and mother, Elizabeth, and grandfather, Jacob Faith, emigrated to America, and settled in the State of Iowa, Lee County, four miles west of Fort Madison, where I got my German education. June 8, 1851, I was ordained as a member of the Lutheran Sectarian United Church at Fort Madison. The pastor gave me to remember Mat. 8-26. In 1859 I emigrated to Missouri, Adair County, 16 miles west of Kirksville. In 1861 I married Miss Mahalo Cox. To us were born three sons, the oldest dying at 6 months; second son, George, and third son, Frank. A little girl 2 years old, Mary Fares, was given to us to raise and staid with us until she was married. In 1875 we moved to Vernon County, Mo., two miles west of Montevallo. In 1907, March 10, my wife died. She had been a true and loving companion. She was buried in Olive Branch Cemetery, with a tombstone to mark her grave, with her picture and mine enclosed; also evergreen and other trees which I planted. In 1906, June 17, I went to Eldorado Springs, 16 miles northeast of Montevallo, to grow flowers and nursery trees.

When a boy the first money I could call mine I spent for flower plants and trees. In my 16th year I was sent to the English school, the alphabet proving the hardest lesson for me to learn, but I learned faster than any other children. The schoolhouse was a log cabin, sided with split logs; there was no blackboard. The teacher's qualification was a fair sample of the schoolhouse. My parents cared nothing for me to get an English education because most of our American neighbors could not read nor write. Most of the American women smoked and some chewed. I studied hard to learn to read and write in English and thought where there was a will there was a way. In May, at the age of 35 years, I became a member of the Missouri State Horticultural Society, attended the meetings, prepared papers and read them when I could attend in person. I wrote hundreds of articles for the press, COLMAN'S RURAL WORLD being my choice to write for and my subjects were Horticulture and Temperance. Often before writing I bowed my knees in prayer, asking God to give me thoughts to write that would be of value to my fellow men. When I came to Vernon County I saw the need of a Sunday-school and organized many. It was very hard to start a Sunday-school. People loved to hunt and fish and go visiting on Sunday. I spent much money for hymn books and bought union school hymn books and started the work as best I could. I was so constituted that I loved to do good to benefit my fellow men; I often neglect myself. I remember giving a neighbor 25 cents to get a warm

dinner when I had to go with a cold lunch, and in two years had to pay \$210 security for that same neighbor. My life has been spent more to benefit my fellow men than myself and family. From boyhood I worked hard and was saving. I spent no money for strong drink or tobacco and never used profane words. My work planting trees, vines, flowers and urging temperance for the young people may stand to my memory when my body is dead. I never took an active part in political or church denominations. I helped support all ministers who came into the neighborhood, but left the church I was a member of because I could not get the pastor to quit using tobacco. I claimed a preacher should set an example for our children. I gave hundreds of meals and night's lodgings to worthy persons; I never refused a meal when asked, and they were many in grasshopper times in Kansas. Many evergreen trees have I planted on the graves of friends, and on most of them they are the only monuments. Often I have been asked: "Are you not too old to plant trees?" I never will be too old to plant trees and vines as long as health permits. I never want it said at my death: He ate fruit from trees planted by others; or he is not missed; his place is not hard to fill.

I married at the age of 24, my wife 22; we had nothing but willing hands and healthy bodies. Before I was married I worked hard, was saving and had \$250 which I was swindled out of by a land agent, buying land before I saw it. I had learned the cooper trade and in winter I made barrels and in summer worked on the farm. We made more money than any two neighbors. One year my taxes were over \$100. In war times I was exempt, being near-sighted, but my eyes are good yet; I can read until midnight. In time of war neighbors were divided and some were killed at their homes. I had no enemies and got through all right. I was strong from 21 to 35; I was called the stoutest man in the neighborhood. Now, although 77 years old, my health is good; but reason will teach that life in this world will soon end.

Looking back over the years of my life, they have been intermingled with joy, sorrow, ups and downs; joy I cannot call back to life; sorrow I don't want; hollow, hollow is the world. The only treasure I laid up is charity, sympathy for the poor, urging and writing what I thought was of most benefit to my fellow men. This task over, I feel the promise of pardon of my many wrongdoings to men and over-working of both oxen and horses, not treating the beast God gave us better. Planting trees, vines, flowers; urging temperance may be doing good and live when I am dead; when my mind can give no more thought to my hand to write, for my lips to speak, I pray the link broken in the family by my death will lead children and grand children to heaven and to God. It appears that I stand on an eminence overlooking the garden of death; sweet is the night rest after a hard day's labor. I pray when it is the Lord's will to call me from earth that I may be ready and prepared to bid farewell to those near by the ties of nature. I am going home from this world of pain, sorrow, death, to endless joy, where I wish to meet you all with aches gone before, where there is no more sorrow, no pain, no parting, all love and endless joy.

POTATOES AU GRATIN.

Wash potatoes, put in a saucepan with the skins on, and boil. Peel and mash, seasoning with salt and pepper and butter. Spread a layer of potato in a buttered pudding dish, sprinkle with grated Parmesan cheese, then another layer of potato and more cheese, with cheese and butter at the top. Brown and serve very hot.

Acts on the way tem. In u coated Edit been l ruary many minds me to of the Such about and m childh I was have recall years me fe fell th is lik good shall thous The cal th the l travel can o the w also water call o no di recall enoug then the m We n been this thoug Th Bill ders mana Ar the d Will the c him Chr Chris mind thou belie fear Chr shou I co read I w wou He the o to d that the No this wha year in t the muc of f late that neg plan tim cou wer neg

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In usual liquid form or in chocolate coated tablets called **Sarsatabs**.

GRANDIN, MO., NOTES.

Editor RURAL WORLD: I have been looking over my paper dated February 6th, and I find many things and many suggestions made by many minds of many people, and it puts me to thinking, is everybody thinking of the same things at the same time? Such is thought. I have been out about my place many times at work and my mind would drop back to my childhood days, 50 years ago, when I was but a small boy. Those years have vanished away and cannot be recalled although to think back 50 years to my boyhood days, it makes me feel happy; it almost makes me feel that I am but a few days old. It is like some of the teaching of our good book, that by Christ one day shall be as a thousand years and a thousand years shall be as one day. Thought is one of the most electrical things that was ever bestowed to the life of man; thought and mind travels faster than lightning or wire can carry it, and this is a gift to the world—both to living beings and also to every living creature in the waters and on the land. We can recall our friends by thought or mind, no difference how far away; we can recall the heavens, which no man has enough brains to figure the distance; then we are not supposed to conquer the minds of our sons and daughters. We may try to teach them as we have been taught or as we think best, but this may not quite answer their thoughts or their minds.

Their minds may be like the one, Bill Bailey, a mind to see the wonders of the world—then how can we manage to keep them on the farm?

Are we more powerful today than in the day that Christ was here on earth? Will say I hardly think we are. In the day of Christ did not Peter deny him before the cock crowed. Did not Christ tell him he would deny him? Christ knew Peter's thought and mind. We don't know anyone's thought only our own and can hardly believe what we see. Why did Peter's fear cause him to deny Christ? No Christian, no matter who they may be should fear death. I only wish that I could say come along death. I am ready to go when I can say this. Then I will have no fear, but the world would be a paradise to me.

How many so-called members of the church today could say I am ready to die? When I can say this I feel that I could see everything bright as the golden gate at heaven's door.

Now I want to tell the readers in this story in which I have written what I heard down in Louisiana a few years ago. It was my first trip down in the old Creole state and I was out in the country some six miles from the railroad town, and I was very much amused at the Creole language of this native of Louisiana. He related to me that many plantations in that state had been deserted since the negroes had been freed and those plantations had grown up with pine timber and other forest, and well could he remember after the negroes were freed, there seemed to be more negroes than white there then—that

the negroes got so bold that they even went so far as to boast that they were going to kill off all the white men and take their wives for their own wives.

The whites heard this, and all of them around in a parish or two made up a fair regiment of whites, shouldered their guns and corralled those negroes near the center, like men on a wolf hunt, and run them all into a two-story log house and captured one negro, and told this negro that if he would take a two-gallon jug of coal oil and pour it all over the porch and under the door and touch a match to it, they would spare his life. So he did as he was told. He said when the fire got to burning pretty well those negroes piled out of the window upstairs, some with their clothes on fire, and that every negro was riddled with bullets as they leaped out in a heap. He said there was a pile of dead negroes as high as his shed, and that was the last they ever heard of their taking the white women for their wives. And from that day till this the negro is just as afraid of these natives as in the day of slavery.

The cotton ridges are there today, for I saw them when I was down there, running through that pine timber, where the timber stood thick, some of it 15 inches through, that had grown up since the negroes were freed.

To educate the mind, one more little incident and not to burden my readers with space and I will close. This same man told me that two boys were raised up by a good man, one was a negro, the other was a white boy, both the same age and both treated well, no difference or partiality shown. He said this was as good a negro as you ever saw, but just give him a chance and he would steal anything on earth he could get his hands on, and to be with him he was as trusty a negro as ever lived, but when he was in the dark he was treacherous and unworthy to trust. So you see it isn't in the way that children are raised altogether as some people say, for I have found this to be a sad mistake.

G. W. JOHNSTON.

Written for THE RURAL WORLD. A VISIT TO CALIFORNIA MINT.

By Mary L. (Monroe) Carter.
The 7th of November last in company with about ten I visited the U. S. mint located on the corner of Fifth and Mission streets in San Francisco. The first we saw of the precious metal that is molded into the almighty dollar was \$10,000 worth of fine particles of placer gold, about half a pint. The next was a \$40,000 amalgam cake of fine gold. The mint contained at that time 62 million silver dollars, one million in halves, quarters, and dimes, certificate bars of gold, 80 million. Gold coins in \$20, \$10 and \$5, 26 million; crude gold, 30 million; Fine gold bars from Selby's 30 million. One pound of copper will make 380 pennies.

With the old machinery, at one time the mint employed 86 women, whereas now with the new machinery for weighing, milling, stamping, etc., only two women are employed. Formerly 324 people were employed in the mint, now they employ only 124. Spanish and foreign coins are remelted. All metal is weighed from one room to another, and if there is a shortage, the mint officers know where it is and who to charge with it. Ten-cent pieces are cut out of long silver blanks, 500 a minute, mill 1,000, finish 150. They are counted on a board, 1,250 put into a tray, which amounts to \$125.00. Eight fillings of the tray makes \$1,000. It is then weighed and checked again in the finish room on the counting board. They issue gold certificates against the gold bars. There has been no coinage of gold here for one year, nor will there be for two years more.



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The gold is brought to 999.5, 1000 is virgin gold. To our friend Mr. Talt Hawes we were indebted for the above information, that I hastily jotted down in my note-book.

At this date, February 10th, I am at Mountainview, Santa Clara Co., and the almond trees are beginning to put forth beautiful white bloom. Soon this valley will be clothed with millions of fragrant bloom from the orchards.

EASY WAY TO BOIL MACARONI.

A help in boiling macaroni is to put it in a wire flour-sifter having a tin handle and immerse this in a kettle of boiling water. There will be no trouble caused by the sticking of the macaroni to the bottom of the kettle and the sifter may be easily lifted from the hot water.

Do not bunch carnations. Let them spread gracefully.

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9489. Lady's Dressing Sack.

Cut in 6 sizes: 32, 34, 36, 38, 40 and 42 inches bust measure. It requires 2 3/4 yards of 44-inch material for a 36-inch size.

9496. Girl's Dress.

Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 3 yards of 44-inch material for a 10-year size.

9505. Lady's Kimono.

Cut in 3 sizes: Small, medium and large. It requires 5 yards of 44-inch material for a medium size.

9514. Girl's Dress.

Cut in 4 sizes: 8, 10, 12 and 14 years. It requires 3 3/4 yards of 40-inch material for an 8-year size.

9511. Lady's Dress.

Cut in 5 sizes: 34, 36, 38, 40 and 42 inches bust measure. It requires 1 1/2 yards of 27-inch material for the tucker, and 7 yards for the dress for a 34-inch size.

9515. Lady's Apron.

Cut in 3 sizes: Small, medium and large. It requires 3 1/2 yards of 36-inch material for the medium size.

9483. Lady's Waist.

Cut in 5 sizes: 34, 36, 38, 40 and 42 inches bust measure. It requires 1 1/2 yards of 27-inch material for the tucker, and 3 3/4 yards for the waist, for a 36-inch size.

9497. Lady's Skirt.

Cut in 5 sizes: 22, 24, 26, 28 and 30 inches waist measure. It requires 3 yards of 44-inch material for a 24-inch size.

These patterns will be sent to RURAL WORLD subscribers for 10 cents each (silver or stamps).

If you want more than one pattern, send 10 cents for each additional pattern desired.

Fill out this coupon and send to COLMAN'S RURAL WORLD, 221 Holland Building, St. Louis, Mo.:

Pattern No. Size. Years

Bust. in. Waist. in.

Name.

Address.

RURAL WORLD readers should note that in ordering patterns for waist, give bust measure only; for skirts, give waist measure only. For children give age only, while for patterns of aprons say large, small or medium.



WEEKLY MARKET REPORT

Hogs in Demand—Cattle Also Higher—Eggs and Butter Dull—General Review of Market.

CATTLE—The showing, estimated at 3500 head, was the lightest Monday of the year. Native supplies were very light, as 2,000 head would cover the offering from this territory. The showing of beef steers were meager and with a good demand prevailing the market was active and values strong to a dime higher. Quality was good and a small string of choice grade beefs sold for \$8.60. Two cars of Tennessee, conditioned beefs brought \$8 and "natives" brought the same price. There was a fair showing of medium grade steers selling from \$7.50 to \$8.00. Two loads of 1040-pound Arkansas beefs on the native side sold for \$7.50.

Heifer supplies were light and a good demand moved all offered at strong to 10c higher prices. Quality was good, considering the light run, and the top reached \$7.25. Most of the good to best offering sold from \$7 to the top, with the medium kind moving at a range of \$6.25 to \$6.75. A fair run of the common kind went to the killers at a range of \$5 to \$5.75.

The inquiry for cows exceeded the supply by a big margin and trading on this class of beef ruled strong and active. The good weighty beef kind were scarce. A few head sold up to \$7 with the big end of the good best kind selling from \$5.25 to \$5.75. The trade on canners was not so active and sold at \$4.15 to \$4.25.

Moderate receipts of stock and feeding steers were soon marketed at strong prices. The call from country and local orders continued to exceed the demand and traders are buying for numbers with price a small object. Not many feeders were included in the run, but one drove that carried fair weight and some flesh sold for \$7.10. A drove of good quality stockers averaged 705 pounds and sold for \$7.30. Odd lots of stock and feeding steers sold from \$6 to \$7, and some of the common light weights ranged down to \$5.

Provisions.

Very strong with advances on pork, lard and d. s. sides, and jobbing prices on boxed d. s. meats and plain bacon 1/2c higher; unchanged otherwise. Demand improving.

PORK, f. o. b.—Standard mess in jobbing way nominally at \$19.62 1/2.

LARD—Prime steam nominally at 10.22c to 10.32c f. o. b. at close. Kettles rendered at 11 1/4c in tierces.

GREEN MEATS—Hams—10@12-average at 13 1/4@14c, 12@14-average at 13 1/2@13 3/4c, 14@16-average at 13 3/4@13 1/2c, 18@20-average at 13 3/4@13 1/2c; skinned hams at 13 1/2@14 1/4c; bellies—heavy to medium at 11 1/2@12 1/4c; 6@8-average at 15c, 8@10-average at 14 1/4c, 10@12-average at 14c, 12@14-average at 13 3/4c; shoulders at 10@10 1/4c, skinned shoulders at 10 1/2@10 3/4c, picnic at 8 1/2@9 1/2c, pork loins at 12 1/2@13c for light and 11 1/2@12 1/4c for heavy, lean butts at 11@11 1/2c.

D. S. MEATS—Loose in car lots c. a. f.: Light to medium fully cured rough c'ribs at 10.62c to 10.72c, light to medium do short clear at 10.72c to 10.82c, clear bellies at 11 1/2@12 1/2c, rib bellies at 11 1/4c to 12 1/4c, extra short clear at 10 1/2c, regular plates at 9 1/4c, clear plates at 8 3/4c, fat backs at 8 3/4@9 1/4c. Boxed lots in small jobbing way thus: Extra shorts at 11 1/4c, c'ribs at 11 3/4c short clear at 11 1/2c, bellies at 12 1/2@12 3/4c, plates at 9 1/4c, fat backs at 9 1/4c, standard backs at 11 1/4c.

BACON—Boxed s. c. meats in jobbing way: Breakfast bacon at 16c for heavy to 25c for fancy light, hams at 15 1/2@16c, skinned hams at 16 1/2@17c.

Californias at 11 1/4@11 1/2c, New York shoulders at 12@14 1/4c. Plain smoked boxed lots in a small jobbing way ranged thus: Extra shorts at 12 1/2c, c'ribs at 12 3/4c, short clear at 12 3/4c, fat backs at 10 1/2c, standards at 13c.

TALLOW—Country at 5 1/4c for average run—prime worth 6c and No. 2 1/2@1c less. Packers' prime at 6 1/4c nominal.

Poultry, Butter and Eggs.

EGGS—Weak, but not lower, the snow and wintry weather evidently preventing a decline. Receipts larger but still not excessive. Current receipts at 19 1/2c including new cases, 19 1/4c in good secondhand cases and 19c cases returned; miscellaneous lots from 15c to 18c. Duck eggs at 25c and goose eggs at 40c.

BUTTER—Market dull and lower to sell. Offerings liberal and accumulating, while there is practically no demand aside from the regular wants of retailers to supply the current consumption, and that is only for high-grade fresh goods. Current make. Creamery—Extra 35c, first 30c, seconds 28c; ladle packed 25c. Packing stock (average receipts of roll included) at 19c—sweet fresh roll wrapped in cloth more.

LIVE POULTRY—Receipts light; demand was limited; prices unchanged. Young chickens, broilers and ducks scarce, firm and in demand. Old hens in fair request—mainly for shipment; turkeys and geese dull. Really not enough of any kind of poultry in to show accurate market conditions. Turkeys—Choice dressing, 17c, small and poor, 11c. Fowls—Hens, 12c. Chickens, 14 1/2c; staggy young roosters, 9c; broilers, 17c; old cocks, 7c. Geese—Full feathered, 9c; poor or plucked, 6c. Ducks—Good run, 17c, poor or plucked less. Capons—7 pounds and over, 18c; 6 pounds and under, 16c; slips, 13c. Guinea chickens, round, per dozen, \$2.50.

Vegetables.

POTATOES—Market dull and depressed; nothing done to show accurate values hence quotations only nominal and represent asking prices; dealers not anxious to make fresh purchases and continue to offer low bids, while receivers are holding their supplies on tracks, awaiting better conditions. Car lots, average receipts Northern growth, sacked on track: Rural at 48@50c, burbank at 47@49c—dusty dural and russet burbank bring a premium on foregoing prices, while frosted, rough, undersized or otherwise inferior sell for less.

ONIONS—Dull and lower; market oversupplied and even fancy stock is hard to sell; soft, damp, frosted and inferior practically unsalable. Sacked red globe at 20c to 28c per bushel delivered—top for extra fancy; sacked white range from 25c to 57c delivered.

SPANISH ONIONS—At \$1.10 to \$1.20 per crate delivered.

BEETS—New Orleans and Kenner at 20c to 20c per dozen bunches. Old home-grown at 35c per bushel box loose.

CABBAGE—About steady; demand fair. Bulk New York Danish and Holland seed at \$9 per ton track to \$10@11 delivered (badly frozen nominally less). On orders 75c per 100 pounds for sacked. Red cabbage dull at \$8 to \$10 per ton delivered.

CARROTS—Bulk Northern at 30@40c per 100 pounds delivered. New Orleans at 10c per dozen bunches. Home-grown at 30c per box loose.

Renew your subscription now and you will get the benefit of the best agricultural paper published. It will be steadily improved the coming year and for 50 cents you cannot make a better investment. A marked copy will remind you. See our liberal clubbing offers in another column.

Cattle

CARE OF THE BULL.

By William Galloway.

Do not give the cows all your attention. The bull at the head of the herd should have some care given to him. He is half of the herd. Be sure he is the biggest and best half, and then care for him in such a way that he will stamp his good breeding on his calves. A bull should not be stood in a stall, only watered and fed, and allowed to suffer on account of filth on his flanks, lack of exercise and grooming. He is more than half the herd. He is the best part of the herd of young things he will produce for you.

He should have a roomy box stall in which he can walk about. It must be kept clean and dry and bedded deep with straw at all times. It should be a well lighted stall where you can watch his growth, if he is a young fellow, and where the sun and air can get to him. If a good lot cannot be given him to exercise in, he had better be left to run on a wire after being ringed through the nose. Fasten a heavy wire from one tree to another or from post to post. Have the wire at least eight feet high. A stout chain with a strong snap in the end of it should hang from the wire, not being so long that it will get under the bull's feet and permit him to get tangled up.

The bull that stamps his breed characteristics on his get is not the one on whose flanks manure is accumulated, whose hoofs are rotting in filth, who is never brushed or exercised. If you expect a bull to do his best, treat him the best. Handle him daily. Do not torment him. Ugliness is always the fault of the owner. If a bull is worried with taunts, if he is forced to fight flies during warm weather and given no chance to stretch himself, he never will amount to much as a sire. To bring his breeding quality to its highest value, give him every attention, make him comfortable, feed him well with a variety of grains and some succulent foods, as well, and if you have some light chores to be done which he can handle in a treadmill for a quarter of an hour twice daily, give him the chance to do the work for you. He will be better for it.

He is the greatest part of the herd, remember, and must be treated as such. If he becomes hidebound, his muscles will be sore and hard and it will not help his disposition. This condition only indicates poor care, lack of exercise and a variety of feeds. Brush him daily. In summer keep him lightly blanketed and in winter provide a heavier one. Be proud of him and show him off at every opportunity. If you are not proud of him get one that you will be proud of and care for him right. HE IS THE BIG HALF OF THE HERD.

Waterloo, Iowa.

NO NEED FOR HYSTERIA.

Less than ten years ago the stockmen of the central and western states were much concerned over the market for live stock. They met in their conventions and adopted resolutions urging upon congress the need for extending our foreign markets for live stock and meat products. Committees were sent to Washington to appear before congressional committees and press for action. Many seemed to feel that unless we could find a foreign outlet for more of our live stock products, stockmen would be driven out of business by low prices, says Wallace's Farmer.

Within a decade there has been a remarkable change in the live stock situation. We seem now to have a shortage instead of a surplus. Prices for beef cattle have been high compared with the past. We hear no longer the cry for an enlarged foreign market. Instead, there is an appeal from every side for the farmer to grow

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and feed more cattle, and the prices which have prevailed during the past year are held out as an inducement. These appeals are carried to absurd lengths as witness the quotation in our issue of January 17th from a speech by the head of the Iowa extension department.

We can see no reason for becoming hysterical over this matter. Production of grains and meat producing animals seem to balance fairly well without artificial weights. When the prices for live stock will net the farmer more money than the prices for grains, he will grow live stock without urging. When he can make more money easier by growing grain, he will grow grain.

It is to be expected that people who handle live stock, the local buyer, the railroad, the stock yards company, the commission merchant, the packer, the retailer, and the consumer, should all wish an increase in the number of cattle grown; it means increased business for them. The farmer can hear what they have to say, weight it carefully, consider the source, and be governed by his own conclusions, which will not be far wrong. But we feel inclined to protest against the effort on the part of some of our college young men to make the farmer believe he should at once greatly increase his stock of cattle, and is sure to greatly profit by so doing. These young men have a lot of scientific information about farming and stock growing that it will profit the farmer to have. It rather seems to us that they should confine their efforts to imparting this information, rather than offering advice on matters in which they have had little experience.

The Dairy

WHAT SHALL HE READ?

By C. D. Lyon.

Before me lies a letter from a young man in Illinois. He says: "I cannot leave home to go to school, but I have plenty of time to study at home, so I am writing to ask you to tell me the best book or books to get in order to post myself about feeds and manures. In about two years I expect to go exclusively into dairying upon a farm of 80 acres, rather thin land, and while I have considerable knowledge of the practical or working end of the business, I am very weak on the feeding part."

In answer let me say that this young man had better know one book and know it well, than to own a large library of books and know a little here and there in each one of them. I know one young man who is getting over \$100 per month as a dairy foreman, and whose study along feeding lines was confined to a thorough mastery of Henry's Feeds and Feeding, so I am going to recommend this one book to my young friend from Illinois.

When he has just put in nine months study, two hours per day, on this book, then let him get Armsby's Animal Nutrition and read it, but first get all he can out of Henry's work, which has been truly called "The Feeders' Bible." In the meantime he should read the best dairy and farm papers, and the bulletins sent out by the various experiment stations: Illinois Station, Urbana; Missouri Station, Columbia; Ohio Station, Wooster; Indiana Station, Lafayette; Nebraska Station, Lincoln, and all the other stations, have valuable bulletins along dairy lines, and will send them upon request by postal card or letter.

The RURAL WORLD welcomes queries such as the one sent by the young man referred to, and these questions may be sent either direct to the office, or to the writer at Georgetown, Ohio, as he will have general charge of questions relating to practical agriculture during this year at least.

What do milk consumers think of the fact that two of the milk inspectors of a large city recently told the RURAL WORLD that they used condensed milk on their tables?

Why? Well, just because they know all about the milk sold in the city, and knew that in spite of their efforts to have it sanitary, that it was not, and as one of them said, "While I have no doubt that the condensed milk is no cleaner than the city milk, the dirt in it is sterilized."

The fact is, a very large per cent of the milk sold in every city is produced at a loss by the man who keeps the cows, or if not at an actual loss, so near it that the small margin of profit would be turned into loss, if, at the present cost of labor, he had to put another dollar per cow per month into the production.

OLEOMARGARINE LEGISLATION GOES OVER UNTIL THE SPECIAL SESSION.

After the Committee on Agriculture, by a tie vote, Dec. 17th, 1912, failed to report out an oleomargarine bill, the friends of oleomargarine on the Committee expressed a desire to get the matter before Congress for its decision, and some of them agreed to help report out the Haugen Bill. However, after the Holiday recess, they seemed to have lost their desire for an immediate vote on the measure. The most ardent friends of the oleo makers seem to think that their chances for passing a bill such as the oleo interests want, will be better at the next session. Of course, it yet remains to be seen whether the new members who will help to make up the Sixty-third Congress will be more amenable to

the influences exerted by the big packers, than are the present members.

If the packers can get the Lever Bill enacted into law, it will mean millions of dollars profits to them. That they will eagerly clamor for the passage of this bill at the opening of the special session, there seems to be no question. But the dairymen and farmers of the country, as well as the friends of honest products and square dealing are becoming more aroused, and when the matter gets before Congress, we think the packers will find that not a majority of the Congressmen of this great country will be willing to fall down and worship at their shrine. —N. P. Hull, Secretary National Dairy Union.

Experimental Storage Butter From Pasteurized Sweet Cream to be Secured in Washington.

Three hundred samples of sweet-cream butter which have been held in storage for a period averaging eight months will be examined and scored in the Dairy Laboratory, Bureau of Animal Industry, Department of Agriculture, Washington, D. C., on February 25, 26 and 27, 1913. An invitation is extended to all persons interested in such butter and in the methods used in its production to be present at that time, when they will have an opportunity to examine the butter and secure full information regarding its manufacture.

This butter was made for the Navy Department during the months of April, May, June, July, and August, 1912, from pasteurized sweet cream at five creameries located in Pennsylvania, Minnesota and California. Its manufacture was supervised by inspectors under the direction of the Dairy Division, and complete records were kept of the acidity of the cream, the water and salt content of the butter, and its score at the time of packing. Each of the 300 samples represents a day's make and was taken for the purpose of determining its quality after having been kept in storage. Creameries in different parts of the country are showing considerable interest in the manufacture of butter of this kind. All who are interested are therefore given this opportunity to secure definite data concerning the manufacture of sweet-cream butter for storage, and to observe personally the final results.

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TWO SYSTEMS.

Editor RURAL WORLD: The profit system and co-operative system are antagonistic. One is the selfish capitalistic idea, and the other is the Golden Rule principle.

As light is against darkness, so one of these systems is squarely against the other. They cannot live side by side. The battle is continual and to the finish. The conflict is irrepressible and will continue until it is settled and settled right. The system, which is founded on the grand principle of equal rights to all and special privileges to none, will prevail.

The Profit System is now in vogue throughout our country. It robs the wealth producers out of billions of dollars annually. It takes the wealth of the nation and piles it up in the hands of a few millionaires. It is a continual handicap on the prosperity of our country.

We have this system because the people support it. When "we, the people," the rightful sovereigns who have the divine right to rule, rise up en masse against this system, it will be crushed to the earth and vanish from our sight.

The Farmers' Equity Union is squarely against this system. We are rising up against it in eight states. We are organizing from one to two hundred farmers and educators at each good town and educating them to substitute a cooperative system for the robber system. When we have 100 members in a local union we organize them into an Equity Exchange with a capital of ten thousand dollars. Many of our Exchanges will have 200 members with a capital of twenty thousand dollars.

The stockholders control this capital in each Exchange. The National Union is organized without capital. It is an organizing, educating force and absolutely necessary to success in a great national movement against the unholy greed of the combined few.

The National Union unites all of the Equity Exchanges and leads them to co-operate more and more to the advantage of each individual Exchange and each individual member.

We put a weekly paper in each member's home for three years as soon as he joins, which educates him away and against the profit system, which robs him. The shares are twenty-five dollars each, and the limit four shares. The manager is bonded by a reliable bonding company and his books are balanced once each week. Our commission firm furnishes a uniform set of books to all of our exchanges, and audits them for us once each month by an expert bookkeeper and instructs our managers successfully.

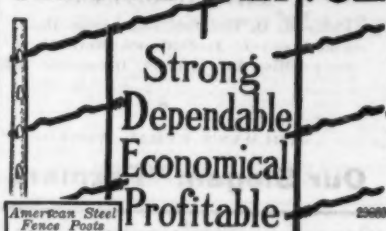
A Safe Margin.

Each manager is required by our by-laws to buy and sell on a safe margin the same as other dealers around him. We never buck the old line elevators. We never cut prices on flour, feed, coal, twine, fencing, salt, cement, nor farm machinery. We buy and sell on the same margins as other dealers and the larger their margin the better we like it. Out of this margin we must pay running expenses, necessary repairs, one dollar a year national dues for each member, all losses which will come in any big business, five per cent for capital invested, and also we like to pay back to each member each year some cash for his patronage.

Outsiders.

We pay outsiders the same price as members. We sell to them for the same price as we do to our members, but we never prorate to them any of the earnings of our company. It is easy for them to get in and have the benefit of our cooperation. If they will take one share of \$25 and patronize our Exchange we will give them three shares and give them back in cash the \$25. Their four shares will cost them nothing and they will be forever protected from the profit-taker who will

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Greenville, Ill. C. O. DRAYTON.

DE SOTO, MO., NOTES.

Editor RURAL WORLD: I want to drop a line for the dear old RURAL WORLD, as you know we readers can't say too much in its favor. It will talk for itself.

Wheat is looking fine, so is the stock in the way of cattle, sheep and goats. We have about 70 head of Angora goats now and 2 kids, about three weeks old; 40 head of cattle, and have taken them through the winter fine so far. We are having fine weather now. If this weather keeps up long and we have sunshine, we can get ready for potato sowing. Enclosed you will please find my subscription for the RURAL WORLD.

H. S. VIVRETT.

Our secretary of the treasury, McVeagh, plans to reduce our paper money in size from 7.28x3.04 to 6 1/2 inches. This would insure an annual saving of nearly a million dollars.

The Mexican situation is very serious at this writing, and while this government is to be congratulated on not rushing into a conflict that would mean the enormous loss of valuable lives and treasure, yet it looks very uncertain that we can tolerate much longer so unstable a government as this unfortunate neighbor is maintaining. One overt act on the part of Mexico, endangering the lives of foreigners is all that stands between peace and war between the United States and her unruly neighbor.

Read our seed corn ads and make your selection early. You have no time to waste.

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Our Slogan: "Farmers Must Be Co-operators"

SOME WELL-CONSIDERED SUGGESTIONS.

Editor RURAL WORLD: Equity suggests a very broad subject and great numbers of people are thinking and acting on the line suggested in a more or less practical way. Secretary Wilson, in his annual report, among other things advises farmers to organize and form co-operative associations for natural benefit and for the elimination, as far as possible, of the high cost of living. By studying and practicing better methods of cultivation and distribution, and also reducing the unnecessary number of middlemen. There are many efforts to this end being made all over the land by the Society of Equity, the Farmers' Educational and Co-Operative Union, Grange and many other organizations for the betterment of society in every line of thought. But the farmers alone as producers of food and clothing products can never accomplish those results without recognition of and the co-operation of the consumers' end of the proposition. Otherwise it would be like swimming against a strong current in strange waters—a hard proposition. But the work will go on and progress will be made slowly until a satisfactory system has been established. In the meantime, however, many partial failures will have to be contended with and obstacles must be met and removed.

A news item from Kansas City states that three hundred ladies met, organized and prepared a house to be used as a market place to which farmers are invited to ship their produce and from there to be delivered to members and others at a reduced cost. A bright idea.

State President H. S. Mobley of the Arkansas Farmers' Union has established a store in Little Rock of farm products only, and it was a financial success from the first day. He buys direct from the farmer's dried apples, pears, beans, onions, peanuts, bacon, lard and anything of that nature that can be used, paying the farmers good prices, and lets his city customers have them at a much lower figure than they can get them on the regular market.

Co-operative exchanges are slowly but surely coming, but they cannot be expected to spring to perfection in a day or a year. For some of the greatest institutions have required the longest time for development. The principle of co-operation has been in existence since things began to move, and we are learning Equity by educational union.

There is one idea of co-operation which I for several years have hoped to see in operation, the various parts of which exist already in a disconnected manner. It only needs to have the scattered fragments gathered up and properly joined together. Then where a little appreciative energy is added for use in overcoming friction it ought to gain momentum, for to eliminate the needless and retain the good is the problem of progress. Establish union exchanges and use those already established. A local stock company to carry in stock and supply to its members and customers such things as they need and must have and also buy and sell what is offered for the market for which there is a demand. This produce to be shipped

direct to co-operative houses in cities where it can be used and delivered with as little expense as possible. The exchange should have its capital distributed among as many members as possible, each holding a small amount of stock and a disposition to support the institution. Then in order to reach other farmers who might not otherwise come quickly in contact with the work, let each exchange run a wagon and carry dry goods, groceries and a few other things that farm people need in small quantities regularly of a busy season, delivering what is wanted and buying poultry, eggs or other things that can be carried, paying or receiving the difference in cash. A wagon could serve fifty or more families a day and about three routes each week, going twice a week over each route in summer when farmers are too busy to stop work to go to town. This would secure and hold trade for the exchange which could not be expected in the usual way. This is co-operation. Then there is another feature which would surely be a much more lasting benefit. Let each stock company invest a little capital in some good books and other literature suited to the needs of those with whom they do business, both old and young; make a list of all books, with brief printed description of each; load in the wagon a small assortment of books, and having placed a list with each family they can make selections quickly. For the use of a book a given number of days charge a small fee, enough to pay expenses. If anyone wished to own a book just pay for it and keep it. This could be made of interest to each member of nearly every family. It would place the isolated ones in easy reach of a library, appeal to the thoughtful mind and stimulate thankfulness in the other sort. That would be co-operative and educational on the principle of Uncle Sambo's con trap: "She des keches 'em 'er comin' an' 'er gwine."

Many farmers can and do have all the literature they need or want, but many more have not, and after meeting other necessary expense can't afford it; a few books and good farm papers could be made to serve a greater number of people, and in a few years would produce a bumper crop of intelligence, but not an over production.

At first thought such a system of "gathering in" might seem too costly to be practical, but it is not, for in many communities eggs and poultry are gathered almost entirely by "chicken peddlers" who drive about over the country till they have bought a load, then sell to a local dealer for a profit, who in turn sells to a commission man and he to a cold storage company, where they are often kept several months, from which they find an outlet through a wholesale jobber to a retail dealer, finally reaching the consumer's door by free (?) delivery at a ripe old age and at last resting in peace on the dining table under the sod of about three times as much price as one of that great age should justly be required to bear. That is "commerce."

Why continue a system of business after its days of usefulness are past however efficient it may have been? There are from one to five unnecessary middlemen between the producer and consumer. Equity says: Shorten the

route, by establishing collective exchange stores in agricultural communities connected with exchange delivery stores in the cities.

Another feature of a Union Exchange store which managers might wisely consider and provide for is a rest room. Hundreds of farm ladies whose business often require their presence at town all day and many of whom have no personal acquaintance with whom they may retire for a short rest, must while away the time in some crowded store dodging after the manner of the playful kitten trying to keep out of the way of those who have not time to lose. The result is they return home at the close of the day tired out and "worn to a frazzle." A rest room need not be a large elegantly furnished hall, but a room, however small, made comfortable and pleasant for an hour or two of quiet reading, rest and conversation. A rest room might prove to be a valuable asset from a business standpoint in furnishing a necessary attraction for those with whom business is sought. Anyhow it would be of a strain closely related to the Golden Rule.

Moscow, Ky.

W. F. C.

TEN-DOLLAR PRIZE.

Editor RURAL WORLD: We want a thorough canvass of our Equity Union territory in March and April.

We want the members in each of our 53 unions to see every farmer in March or April who should market at their town, and if possible land him as a member. We have printed 3000 blank applications for members and stockholders. Ask your local union secretary for blanks or write to Farmers' Equity Union, Greenville, Ill., for them.

Collect \$3 from each new member and send it direct to "Farmers' Equity Union," Greenville, Ill., with name and address of the member very plainly written and give the name of the Local Union.

A Prize of Ten Dollars

will be given the member who sends in the largest number of new members by May 17th, provided he sends ten or more members by May 17th, 1913.

Be sure to attend your Equity Union meeting on March 1st and secure a number of blanks from your local union secretary and begin your campaign for new members March 1st. Collect \$3 and send name and address very plainly written with the money to "Farmers' Equity Union," Greenville, Ill.

Local Union Secretaries must read this in your meeting, March 1st, and hand out the blanks whenever you see a member.

NATIONAL UNION OF FARMERS' EQUITY UNION.

COLUMBIA EQUITY EXCHANGE.

Editor RURAL WORLD: Dear Friends: A statement of actual facts from Columbia City, Ind. Two representatives of the Columbia Equity Exchange called upon Mr. Bursley of Ft. Wayne, a wholesale merchant dealing in groceries and merchandise. We were given a welcome reception by the Bursley representative, who we informed that our business was to buy a bill of goods at wholesale for the farmers' store at Columbia City. We proceeded at once to give in our order. When loe and behold we were taken before his majesty and informed that we were not so welcome and that our friends and protectors at home, the business men of the town of Columbia City, had served notice on Mr. Bursley's traveling salesman that he was under boycott and the Columbia City dealer would not buy from a firm that would sell to the farmers. This traveling man immediately reported to the man higher up and put

YOUR OPPORTUNITY

is NOW in the Province of

SASKATCHEWAN

Western Canada



Do you desire to get a Free Homestead of 160 Acres of that well known Wheat Land? The area is becoming more limited but no less valuable.



New Districts have recently been opened up for settlement, and into these railroads are now being built. The day will soon come when there will be no Free Homestead land left.

A Swift Current, Saskatchewan farmer writes: "I came here on my homestead, March, 1908, with about \$1000 worth of horses and machinery, and just \$35 in cash. Today I have 900 acres of wheat, 300 acres of oats, and 60 acres of flax." Not bad for six years, but only an instance of what may be done in Western Canada, in Manitoba, Saskatchewan or Alberta.

Send at once for Literature, Maps, Railway Rates, etc., to

CANADIAN GOVERNMENT AGENT,

125 W. 9th St., Kansas City, Mo.

C. J. BROUGHTON, Room 412,

112 W. Adams St., Chicago, Ill.

or Address, Superintendent of Immigration

Ottawa, Ont., Canada

a boycott on the organized farmer of Whitley county.

This is only one little incident. There are others worse. How much longer will the independent farmer stand for this in free America? Did I say free; then I am mistaken, it is only free to those who will organize and make themselves free.

Who among the farmers want to support a system that will boycott their own customers, or cause a firm in Ft. Wayne to boycott their home people? This is the system you support when you refuse to support your own union. Which do you want: to be free yourself or be bound and compelled to support an organization for the business man and make him free? If you are an American citizen, organize in the Farmers' Equity Union and maintain your independence. If you wish to be a subject of boycott stay by the old system. We have the goods. Come and buy.

L. L. NOLT, Mgr.

THE REMEDY—JOIN THE FARMERS' EQUITY UNION.

Editor RURAL WORLD: Mr. Farmer of the Northwest, have you gotten your eyes opened the last few days? The terminal elevators and the Board of Commerce of Minneapolis have robbed the farmers of the Northwest of three million dollars in the last two years through inspection and mixing of grain. They have done this because the farmers are an unorganized mob and because the farmers insist on sending lawyers and editors to make their laws. The remedy is join the Farmers' Equity Union, send honest men to the legislature—men who are farmers or have the welfare of the farmers at heart, and store your grain in your granary on the farm. Do not store in your local elevator because that helps to break down the price. I hope that this investigation will help the farmer to a fair deal.

A. E. BORG.

Java, S. D.

THINGS CO-OPERATION OF FARMERS' ELEVATOR AND EQUITY ELEVATOR ARE DOING.

Last fall when we started our elevator here at Leola one of the old line companies taking exceptions to our way of getting the farmers to hand themselves together for the mutual protection and for the betterment of their way of selling their grains, started in to buck the market with the assertion and threat that they would put us out of business within a year and paid up above the margin price at this station from 1 to 3 cents per bushel all the fall. Realizing that it was folly not to be wise the president and directors sent out personal appeals to the members to be loyal to the union and to stand pat upon Equity Union principals, and by our business we are

happy to say they have been loyal almost to a member. A number of us not being satisfied with the laws governing the control of corporations, began to agitate among the farmers' elevator companies. The passing of a law prohibiting any corporation or individual company from discrimination in buying or selling lower in one place of business than in another anywhere in the state; that is to say that they must buy at the same price in all places where they do business within the state. Montana passed such a law, and our representative says such a law will pass with our legislature, and we certainly hope so, as we consider this one big stroke for the advancement of the Equity Union. Let every member boost. Great good will be the profit.

Leola, S. D. A. HOFFMAN.

HITTING THE NAIL ON THE HEAD.

Able Address on the Necessity of Cooperation.

(Concluded.)

Do you think the government will come to our relief when matters get so bad as to be unbearable? Can you not see that this handful of millionaires are the actual rulers? If it were not so, how could every effort be nullified that is undertaken to destroy their power? And it will be a long time before we see their power broken. We have to break this power ourselves. It only can be done through organization, education and co-operation of at least 2,000,000 farmers. In other words, we have to stop competition. We must handle the products of our toil ourselves and not let the profit takers get hold of them. This can only be done if we organize ourselves into a co-operative body with the aim to handle our own products and demand a just price for them. The world is teaching us dear lessons, day by day, coming and going, how powerful combinations are. Why can't we do the same? Can we not teach the rest of the people just such a dear lesson as we are taught? But we are not going to be that mean. We do not want to put the rest of the poor toilers in other industries at the point of starvation, even if we succeed in organizing all the farmers. We will go with all the products finished on the farm direct to these poor toilers in other industries, and by this means save all the commissions charged by middlemen and traveling men, and all the profit levied on us and these poor toilers by the rich money kings. The products that must be finished in mills and factories we will take direct to these money kings, demand a just price, which they will have to put up for them, if our organization ever gets strong enough. Without organization we will never have the power to accomplish anything. Here also we will save all unnecessary handling expenses and commissions of all descriptions. We will do the same when buying products that we must have. All the commissions charged by middlemen, traveling men, and all the advertisements will be a thing of the past. You can see in the Year Book of the Agricultural Department that we farmers receive only 65 cents for every dollar's worth of our products. In the census reports you can see that we farmers receive only 50 cents' worth of value for our dollar on goods we have to buy. In other words, for a dollar's worth of our products we receive 32½ cents' worth of goods that we must buy; 67½ cents goes to middlemen, traveling men, wholesalers, manufacturers, railroads, advertising, and the profit account. Through the organization of the business world we have to stand all these just and unjust charges. Their aim is wholly and solely to hold down the prices on producers to the last possible notch and up on the consumers to all they can stand.

We farmers will organize ourselves into a body of golden-rule co-opera-

tors for justice to all. This is the aim of the Farmers' Equity Union, and in behalf of this Union I appeal to you farmers to join this movement. The aim of this Union is to cut out all unnecessary handling expenses, commissions and all other unearned profits.

You ought to understand that the management of the market today is bound to ruin all the farmers over the whole country. If you do not like to be ruined you must join this movement. It is our last anchor of hope to escape the inevitable ruin. It is your duty toward the well-being of your family, as they have to depend on you.

Most of you have read my article in COLMAN'S RURAL WORLD, "Farmers Must Cooperate." The statements therein can't be questioned by anyone. If you have read it carefully you must be convinced that in a short time there will be only a few individuals in this country who will own all the resources of production and distribution—in fact, all the world—and the coming generations will be worse off than the slaves. Nobody and nothing can stop this, if matters are allowed to go on as now. We farmers as a united force are able to stop matters if we find the right way.

The constitution and by-laws of the Farmers' Equity Union, if truly understood and carried out by the farmers organized in this Union, will prove a mighty factor to stop all abuses. But the farmers have got to join this movement. I'm a farmer, so are you. It means all of us. There is no use to stay aside and wait until something can be showed. First, we must organize not a few, but all of us, before we are able to do anything. We can never accomplish anything if a few farmers join the union while the majority stay out to wait and see what can be done. I hope there is no one here that claims farmers will not stick. I hope there is no one here that sneers at a man that is trying his best for the good of all.

Are we really so foolish, so stupid and so dumb that it is impossible for us to take care of the products that we create by the sweat of our brow, through increasing hard toil from morn till late? If through this taking care of our products. We get the power to demand a just reward, have we not intelligence enough to take care of it. Is it not our duty to combine likewise and if only for our self-defense?

ADAM SCHARICK.

COLUMBIA CITY (IND.) EQUITY EXCHANGE.

Dear Friends: To the members and patrons of the Farmers' Equity Union, No. 26, Columbia City, Ind.

You will find your place of business located eight doors east of the First National Bank. Come in and let the manager know what you want. You will find a supply of fencing, oil meal, flour, sugar and many other things on hand. We are receiving orders for different articles the farmer needs that we may buy them in large quantities. We pay cash for poultry and eggs. Our next meeting will be the first Saturday in March. All members and non-members who want to push the elevator proposition, be sure and attend. We will meet in the assembly room of the courthouse at 1 p. m. Yours truly,

LYMAN L. NOLT, Mgr.

TO FARMERS EQUITY UNION MEMBERS!

If you are interested in building up your union by educating those outside your ranks, send in the names of anyone you think would be interested in your aims and we will send them sample copies of COLMAN'S RURAL WORLD, the Farmers Equity Union official paper.

Try a small ad at 1 cent a word. It will pay.

FARM GATES.

By C. D. Lyon.

Some years ago we decided to do away with all bars and "drag gates" on the farm, and now we have twelve good gates, all made at home, and all swinging clear and free, excepting three which are only used occasionally, and may be called temporary. I never saw a metal gate which sold at a moderate price that I would have as a gift, and so we concluded to make our gates of wood, just common rough boards. We adopted the four-inch strip, one inch thick, as the best for our purposes, making the entire gate of 1x4 stuff, bars, straps and braces.

Our one mistake, that of having our gateways too narrow, 10½ feet, could not be remedied when the gates were made, but this width is the usual one, and our lumber was all bought, or sawed, 12 feet in length, which calls for a little waste. It takes 10 strips to make a gate, six for the bars, two, each sawed in two, for the end straps or battens, and two for the diagonal braces. We space from bottom upward, 4, 4, 5, 7 and 9 inches, and this with the six 4-inch bars, makes a gate 53 inches high, high enough for any gate.

The bars, properly spaced, are laid flat on the ground or the dirt floor of the barn, and the straps or battens are nailed, close to the ends, using at least four ten penny nails to each bar, clinching the nails well, then a 1x4 brace is nailed on each side, diagonally from the upper corner at the swinging end, to the lower corner where the hinges are to be. These braces are opposite one another, one on each side of the gate bars, and the nailing and clinching must be thoroughly done. We used bolts instead of nails on two or three gates, but we find that the nails hold the boards together more securely, and for a longer time, than the bolts do.

Our gates are hung with the common strap and screw hook hangings that sell cheaply by the pound, and we have found no other as cheap and good.

We used pine, basswood and poplar, and some of each, in good condition to-day, have been in constant use seven or eight years, apparently good for as many more years.

As for cost; with lumber at even \$3.50 per hundred feet, we have, approximately, 10 strips 1x4, 12 feet long, 48 feet, or nearly \$1.75, nails 5 cents, hinges 40 cents, total \$2.20 per gate. Twelve-foot lumber cuts with a little loss in making a 10½-foot gate, but with our plan of bracing, it requires 12-foot boards for braces, and in making a 12-foot gate, with 12-foot lumber, an extra set of battens, two feet from the swinging end of gate will be needed, making a little more cost.

Our gates are not painted, as we took the advice of a man of longer experience, to the effect that unplanned lumber would last about as long without paint as with it, although it only costs about 20 cents to paint a gate if common oxide of iron paint is used.

THE AMERICAN NEWSPAPER ANNUAL AND DIRECTORY.

The forty-fifth year of continuous publication brings us the 1913 edition of this comprehensive review of the newspaper and magazine field. To the publishers of this country and to those having dealings with them this work is most useful. The facts and figures pertaining to each of the 24,281 publications listed are presented in a condensed and get-at-able form.

The Annual and Directory is now the only publication of its kind which is compiled from information gathered with such care and thoroughness each year from original sources. Mr. Geo.

EUGENE W. STAPP,

CONSULTING ELECTRICAL ENGINEER.
Designer and Installer of Storage Battery,
Electric Light and Power Plants for the
City and Farm.

402 LACLEDE BLDG., ST. LOUIS, MO.

Local Dealers Wanted

In Eastern Missouri, Southern Illinois
and Eastern Arkansas
To handle Mitchell Automobiles.
The Mitchell is the most popular medium priced
car on the market. All Mitchell cars are fur-
nished with Electric Starter, Electric Lights, T-Head
Motor, and are otherwise fully equipped. The 4-
cylinder, 5 passenger, 40-horse power selling at
\$1500. Correspondence Solicited.
Weber Implement and Automobile Company,
1900 Locust street, St. Louis, Mo.

500-Acre Farm for Sale

all rich level river bottom land, above
overflow, and only 6 miles from railroad
town; on two public roads and tele-
phone line. There are 300 acres of this
in cultivation and balance in timber.
There are 10 houses and a store build-
ing. People are all white and native
Americans; most of them are from Illi-
nois and Missouri.
This property can be bought for \$40
per acre if taken this month; ¼ cash,
balance to suit purchaser. I have two
smaller farms for sale also.

L. G. CROWLEY,
Black Jack, Ark.

P. Rowell was the first to compile such
a work, and for many years he issued
the American Newspaper Directory in
the interest of publishers and adver-
tisers. Following his death, the Di-
rectory, with its records, copyrights
and property was sold to N. W. Ayer
& Son, Advertising Agents, Phila-
delphia, who combined it with their
Annual.

A specially valuable feature of the
present volume is the population of
over eleven thousand towns, little and
big, as given by the U. S. Census of
1910 and the Canadian Census of 1911.

Supplementary to the general cata-
logues are 208 lists of daily papers,
magazines, women's publications, mail-
order publications, agricultural, religi-
ous, and the various trade and class
papers, each listed under a separate
head.

The Annual and Directory likewise
presents a vast amount of up-to-date
gazetteer information showing the
transportation, banking and other fa-
cilities of every town in which a news-
paper is published, together with refer-
ence to its leading industries and char-
acteristics.

WASHINGTON.

He never saw a motor car
Go dashing through a crowd,
He never saw an aeroplane
A-sailing 'round a cloud.
He never used a telephone
Or saw a baseball game,
But the Immortal Washington,
He got there, just the same.

He never heard a phonograph
Repeat him with a squeak;
In fact 'twas very seldom he
Could be induced to speak.
He did not pose for photographs,
Himself did not proclaim;
But the Immortal Washington,
He got there, just the same.

He sent not friends in parlor cars
A-traveling through the states,
With promises of jobs and such
To capture delegates.
He stooped to no trick or device,
No man did he defame;
But the Immortal Washington,
He got there, just the same.

—Tom W. Jackson.

TOWERS' SYSTEM OF SURFACE CULTURE.

In another column will be found the
ad of J. D. Tower & Sons Co., 5th
street, Mendota, Ill., and as this is
the season of the year when farmers
need cultivators you should look into
the merits of this company's product.
In the ad appears the names of several
prize-winners who were users of the
Tower cultivator. This firm needs no
indorsement as to their reliability.
Send for free literature and address J.
D. Tower & Sons Co., 5th street, Men-
dota, Ill.